

Break

Integrate or else

Is a man who tells the South African Government to throw open its schools to all races, and to amalgamate separate black and white departments into a unified ministry of education, a starry-eyed idealist or a political fool?

Professor Jan Peter de Lange is neither. As rector of one of the country's leading Afrikaans universities, he was the man put in charge of a national investigation into education, set up in the wake of the 1976 'schoolchildren's riots' and the 1980 school boycotts. Thirteen months and an 18-volume report later he was telling the Government unpalatable things about what it should do.

Or are they so unpalatable? He - like a good number of those in power - knows that not to take such steps will lead to an even more unpalatable future. The country must urgently increase its skilled manpower, cope with falling numbers of white university students, appease simmering black anger, and try to meet the needs thrown up by the burgeoning black birth rate.

Professor de Lange - a slow, serious, didactic man - sees all this, and more. He claims to have a shrewd idea how to steer his ideas through. Alongside his recommendations, for example, he submitted the results of opinion polls, which showed that even radical changes would be more acceptable than might be generally thought.

Perhaps more important, though,



"Well he obviously has a university place, I wonder who has the other."

is his known close contact with the Minister of National Education (i.e. white education), Mr Gerrit Viljoen, a political high flyer, and a former incumbent of Professor de Lange's rector's chair.

As a result, he speaks with authority on government thinking. Watchers of South Africa's slow educational evolution will soon see the introduction of quotas for non-white students at white universities, he says. A national educational council, bringing together all races and all interest groups, will be set up, and separate education departments will begin to work much more closely together.

A single ministry is still a way off. Entrenched political and bureaucratic interests will do their best to hold it at bay. But, nevertheless, he is sure it will come.

Meanwhile, after a busy two weeks as a guest of the British Government looking at further and higher education in England and Scotland, Professor de Lange has taken himself off to Essex for a little light wood-turning, before flying back to the political fray.

One has had enough

Example for students of educational politics. Who wrote the following letter to Sir Keith Joseph in 1982?

"What are the plans and policies of your Department? What are their aims and objectives? Only two spring to mind: one is to cut expenditure; the other is an obsession to re-fight old battles about something called 'preserving standards', which appears to most people to mean guaranteeing good traditional academic courses for the top and devil take the hindmost."

You might have guessed this came from the more literate end of the pressure-group spectrum (that impeccably-placed colon and semi-colon). But would you have hit on the normally smooth and polite Secondary Heads Association.

Donald Frith, SHA's general secretary, says "One suddenly decides that one has had enough."

Frith is an ex secondary head himself - he ran the prestigious York grammar, Archbishop Holgate's, before taking on the double job of secretary for both SHA and the Head Masters' Conference. He's a cultured liberal: "He was almost too nice to be a headmaster", said an old York hand.

Before firing off his diatribe about the general hopelessness and inactivity of the DES to Sir Keith last week (the substance was reported in last week's TES) he consulted some influential SHA members. All of them, he says, were delighted to give their imprimatur.

Even so, at a meeting with Sir Keith later in the week, the Secretary of State was apparently "genuinely unprepared to believe that what we were saying represented a general view."

Contributing to the debate on denominational and ethnic schools, Councillor Hilary Benn, of Ealing, wrote as follows (*Times*, February 12): "The most fundamental objection of all is that the principle of comprehensive education (whose purpose is to break down barriers of selection, class, race and social inequality) would be irretrievably damaged if our education system were to be divided on religious grounds. Although I oppose the further extension of denominational education in the public sector, I am well aware of the concern felt by some parents, particularly from ethnic minorities, about the lack of appropriate religious and cultural education for their children. Schools can play a part in meeting this need through comparative religious education and by encouraging cultural diversity."

I could quarrel with Hilary Benn on the question of the purpose of comprehensive education, in whose principle I strongly believe, but not perhaps on quite the grounds alleged. But such generalities are probably not very important. What is important, I think, in the above quotation is the confusion of "religion" with "culture", and the consequent muddle about the role of "comparative religious education."

If we are anthropologists or, indeed sociologists, surveying a society from the outside, we may very well think of religion as part of culture, in the anthropologist's sense of that word. Taking this detached and Olympian view, we may well see great advantages in comparing one culture with another, though this may be rather a tall order for children still at school. But at a fairly straightforward level to teach children a wide diversity of, say, music, and to encourage them to compare the tradition of Western music with that of the West Indies, or India; to show them the mutual influences and possible future enrichment of one culture by another, all this is highly educative, and, if well done, might even have a good effect on personal as well as cultural relations. But such detachment would by no means satisfy those who want their children to receive religious education. While "diversity of culture" might be generally agreed to be an excellent aim in a school curriculum, "diversity of religion" does not make sense; and comparing one religion with another could never be thought to be "religious education", except to one who was not religious. That is not to say that it could not be interesting and instructive, but it is a different "subject" from that which religious parents would hope for, for their children.

Players take on different characters, choosing some of their attributes and depending on the roll of glittery many-sided dice for others.

Apart from the dice and rule book - made to be broken - the game needs no equipment. But a whole set of accessories are now made - dungeon plans, fantasy record sheets, fat dictionaries of monsters (from *Ankhkhoe* to *Xorras*) and attractive lead models which will no doubt be bought by collectors at Sotheby's when the craze passes.

There's a magazine, *White Dwarf*, which sells 20,000 copies bi-monthly, and gives new twists to games, criticism, and an agony column: "At the moment I play an 11th level paladin. However, I have a query about the bard character class. Basically it is this: can bards ever have assassin abilities?"

Several schools have Dungeons and Dragons clubs. Now the game is infiltrating teachers' conferences. I was told that Essex is interested in using it in programmes for gifted children, and Games Workshops are laying on a demonstration for teachers at a conference in York.

Dungeons and Dragons (and the many other fantasy games it has inspired) is unlikely to lead to club leagues and master points. It is highly individualist and not even particularly competitive.

But with all its associated shops and model factories, Games Workshops alone now has an annual turnover of over £1 million. It may be the ideal game for the post-industrial world.

Artisides

Next week

Schools of the future? 12 pages on how computers affect schools, with Seymour Papert on microworlds, assessments of national projects, and an interview with Kenneth Baker, Minister for Information Technology.

Also, the pedigree of role-play, the auto-didactic books war, and who will replace the Children's Committee.

Personal column

Mary Warnock

Holy smoke-screen

Children. What they want is not education about religion, but education about education. Parents who crave religious teaching want their children to be taught that a certain way of looking at the world is right, that one view of the story of the relation between men and the universe is true, and that this is precisely what anthropologists/sociologists/teachers cannot, and must not, allow. I must be neutral, cool-headed, an observant, like a naturalist. He cannot participate in what he observes without losing his right to teach his subject.

So what is to be done? One might say that the solution is to have religious education taught, probably by religious teachers. In different settings, Hindu, Christian, even from a Muslim and Catholic if need be, there could be a set for comparison studies for those children whose parents preferred it. Another different approach would be to have religious teaching through art, music, literature, relying on the fact that religious imagination is not different from the aesthetic, and that the looking, for example, at religious architecture, a child might get a sense of religious worship. In religious schools, Christian art would be a predominant, but it need not be the only one to be considered.

I prefer this approach. But the problem is that I don't know either what this could amount to teaching religion, nor whether my inclination towards that comparative method of teaching could not do the job as soundly based.

We have here a subject which urgently needs to be researched. And what is needed is not just research carried out by teachers using different methods, and using different children. To be carried out systematically and in such a way that actual conclusions may be reached, teachers need to be given a university methodology and efficient administration. I believe that an increasing number of young parents, of all ages and creeds, are anxious that their children should have, and should benefit from, religious education. We know what will satisfy such parents, what will actually give their children the stability of belief and the foundation for morals that their parents want. We are all at the mercy of contradictory religion. Some of us, what will actually give their children the stability of belief and the foundation for morals that their parents want. We are all at the mercy of contradictory religion.

In this particular field, some universities with theologians and others with humanists are prepared to take each other should get the cooperation of their local education authority, jointly make a start.

European verdicts could hold key Ruling on pending cases may force ban on corporal punishment

by Biddy Passmore

Outcome of at least six cases being argued with the European Commission of Human Rights may force the Government to ban corporal punishment in State schools throughout the United Kingdom.

The six sets of parents, whose children were either caned or belted, are asking rulings from the European Court of Human Rights that corporal punishment is "inhuman or degrading treatment or punishment" and thus a breach of article 3 of the European Convention. In a further two cases, the children were not actually beaten.

In last week's controversial judgment on cases brought by two Scottish mothers (see page 10, 11) the judges ruled by six votes to one that the existence of corporal punishment in their children's schools failed to respect the parents' "philosophical

to Physical Punishment (STOPP), dismissed the circular this week as "not good enough". "It puts the onus on local authorities and schools," he said, "when it ought to be on the Government."

Three of the six cases involving actual beating are being brought by English parents and three by Scottish. The one most likely to reach the court first is that of a boy from Derbyshire who was given two strokes of the cane.

If the court now rules that corporal punishment is "inhuman or degrading", the Government's existing problems over corporal punishment will deepen. Ministers and officials are already debating if - and how - the Government should react to the court's ruling that parents must be able to insist that their children should not be beaten.

Dr Rhodes Boyson, junior education minister and a stout supporter of the cane, has declared the ruling unworkable unless separate caning and non-caning schools are set up. Sir Keith Joseph, the Education Secretary, is a less ardent supporter of corporal punishment but is said to believe that teachers should be left with discretion to use it.

Education ministers are said to be most reluctant to adopt the simplest solution - abolition of the cane - because they fear it would cause a howl of Tory outrage and fuel existing anti-European feelings. They are believed to be extremely irritated by the unilateral action of Mr George Younger, Scottish Education Secretary, who wrote to Scottish local authorities advising them to drop corporal punishment by 1984. It is believed he made the move without consulting other ministers.

The Government's chief hope must lie with the steadily timetable of the European Human Rights machinery. It took the two Scottish mothers nearly six years to get a ruling in their case. Even if the present cases take only two or three years, that puts the rulings well beyond the next General Election.

Strasbourg ruling: reports and analysis P10, 11

convictions" and thus violated Article 2. They also decreed that the suspension of one boy after he had refused to accept corporal punishment was a breach of his basic right to education.

But they did not rule on the acceptability of corporal punishment itself, chiefly because the two school-boys' question had not actually been asked.

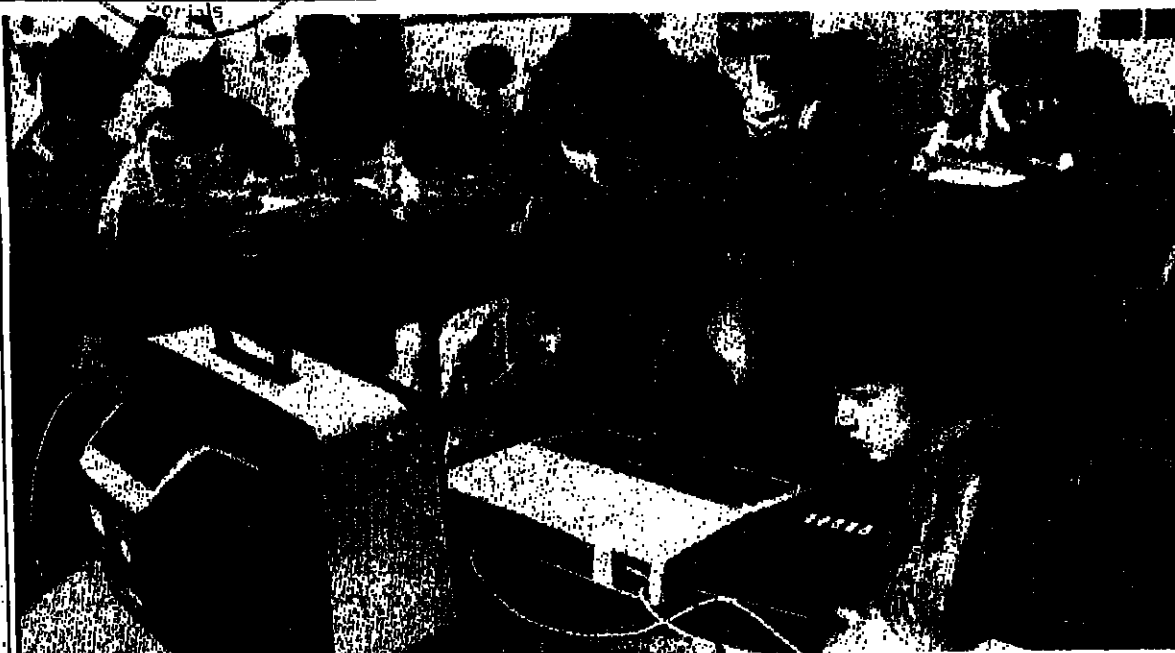
Now, however, news has leaked out to hear that the anti-cane lobby, a girl of 14 who had been caned by her headmistress was awarded damages of £1,200 in a settlement by the European Commission of Human Rights last December. The other half of the settlement was that the British Government should issue a circular, due out this week, warning local authorities that corporal punishment might in certain circumstances be contrary to Article 3.

Mr Tom Scott, education secretary of the Society of Teachers Opposed

THE TIMES

Educational Supplement

FRIDAY MARCH 5 1982 NUMBER 3427



Schools and computers: 1982 is Information Technology Year and the year in which the government is stepping up its drive to get computers into schools. In Extra (pages 31-42) Seymour Papert, author of *Mindstorms*, discusses the school of the future; we interview Kenneth Baker, Minister for Information Technology and assess the work of the Microelectronics Education Programme and the BBC's Computer Literacy Project. Virginia Makins reports on how the BBC Microcomputer is being received in one primary school and there are also articles on telesoftware, interactive video and computer languages. On the Resources pages we carry a directory of software sources.

Bid to recruit the jobless

by Mark Jackson

Youth Opportunities Programme schemes all over the country are being visited by the Labour Party's Young Socialists who are trying to organize unemployed youngsters and recruit them if they can. Their mass lobby of Parliament last week was one of the first results of the drive.

Only one in five of the 2,000 youngsters who joined the rally was a party member, Young Socialist headquarters says. The rest were all in YOP or on the unemployment register. While some of the demonstrators came through their union branches, most were brought through an organization which has been set up by the Militant-dominated YS - the YOP Trainees Union Rights Campaign.

A YS official said this week: "Our members have been going around contacting the youngsters and telling them about the campaign. Naturally, they try to recruit them to the party."

None of the other organizations working on behalf of the young unemployed took part, and Mr Roy Jackson, the YS's education secretary, said the YS's demand that YOP should be ended clashed with decisions of the YUC conference.

Cambridge plan for 16-plus rejected by GCE boards

by Bob Doe

A plan to preserve what some see as the traditional standards of O level in the new 16-plus has been thrown out by the GCE boards.

A document distributed by the Cambridge board suggested a number of tough conditions for the re-formation of the top-three grades in the new system - the grades equivalent to the existing O level.

The Cambridge board has always been hostile to many aspects of the merger of GCE and CSE, seeing in it a number of unresolved technical problems.

But the Cambridge paper was rejected when it was put to the rest of the GCE boards. Now a more moderate version is being drawn up by the Manchester-based Joint Matriculation Board which has historically been more favourably inclined towards the joint 16-plus. The JMB draft has still to be approved by the other GCE boards.

The first paper raised questions about the minimum acceptable standards for awarding the top three grades. There is concern for instance about proposals to allow pupils to gain an O level equivalent in French

without taking a test of writing in the language and about awarding O levels in subjects not traditionally accepted as suitable for academic study, such as ornithology.

Some GCE board secretaries this week were anxious to dispel the idea that they were hostile to the 16-plus or that they were presenting an ultimatum to the CSE boards. One said that they were simply trying to see if there was a consensus among themselves about the ground rules or criteria that should apply to all the new exams, and that this probably would not have been necessary if the Department of Education and Science had produced its proposals as promised last summer on the general principles that should apply to 16-plus assessments.

But while the boards may have declined to ratify the hard-line proposals the damage may already have been done by providing those who wish to resist the merger with some ammunition. A copy of the first proposals went to the DES just when Sir Keith Joseph, the Education Secretary, was known to be reconsidering the whole idea of a common 16-plus.

This week

Why Liverpool missed the danger signals 5

Pupils faint at road safety film 9

Harry Rée on tomorrow's schools

Teach-yourself war 24

The history of rioting 24

Extra Schools and computers 31-42

Comment Platform 22 School to work 14

Overseas news 16,17 Letters 18,19 Talkback 20 Features 21-23 Review 24 Arts 25,26 Books 27,28 Resources 29 Media 30 Crossword, Personal Column and Aristides 72

Classified 43



Rising stars

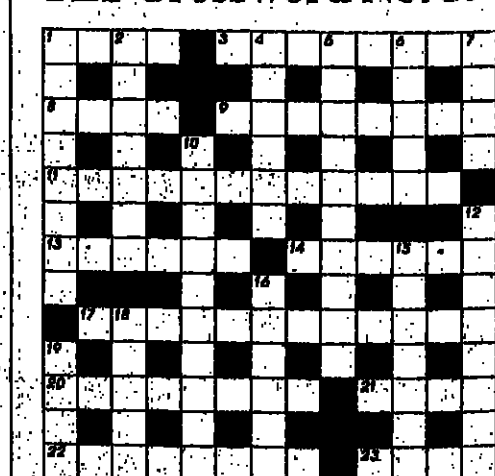
Growing interest in school astronomy has led to the setting up of the Association for Astronomy Education. For some years astronomy has been an O and A level subject but now primary schools too are increasingly looking to the stars.

Dr Julian Rayner, the association's Liverpool-based secretary, said, "There is an increasing awareness that children should know where they are in the universe as part of their general education."

But in addition primary schools particularly are finding astronomy can be a vehicle for teaching other subjects. Many schools have found the enthusiasm for space flight has spilled over into language, number and craft work.

Entries for the London GCE board's astronomy O level are running at about 300 a year.

TES Crossword No. 39



Across
1 The leading Catholic socialist (4)
2 Standard feature of most city streets (4-4)
3 Side-walk pedestrian (4)
4 In a convent it gives preferential treatment (6)
5 Pen or its holder (6,6)
13 Agree it's not small account and give in (6)
14 Entertainment that's a nice change to mother (6)
17 A neglected place of call (9,3)
20 Flight path (4)
21 Spoils of War (4)
22 Their cat are well-known (8)
23 He has writing dictated by the height of fashion (4)

Down

11 Clear up a mess (6)
12 Fashionable, attractive for women (6)
14 News item (6)
15 Subliminal message (6)
16 There's nothing like about her (4)
17 Trifle (4)
18 Possibly something very proper (4,6)
19 Tame to the point of being more than tame (6)
20 Take in arms (4)
21 Strong change (4)
22 Reason (4)
23 Time to make peace (4)
24 Motorist's organization is held up on the road (4)
25 Solution to puzzle (4)



Tawse on the way out: but a bad precedent

Does the judgment of Strasbourg mean the end of caning in the maintained schools? The answer is that it has probably hastened the end, but it does not automatically oblige county or voluntary schools to desist, nor does it necessarily require the British Government to introduce any legislation on the subject.

The Declaration of Human Rights is a long and flowery statement which, like most Constitutions or Fundamental Laws, is deliberately imprecise on many matters. Draughtsmen cannot be expected to foresee every possible circumstance. All they can do is provide a text for judges to construe, and the art of judicial construction lies in extending and applying the ambiguities of one generation to the disputes of those which follow.

The question of caning in school is not, of course, mentioned in the Declaration any more than morning prayers in the Little Red School House are singled out for comment in the Constitution of the United States. But just as the judges of the Supreme Court have had no difficulty in deciding that a constitutional ban on the establishment of any religion im-

plies also a ban on school prayers, so, too, the European Court of Human Rights has concluded that some vague, and obviously unenforceable, references to parents' rights to have their children educated in accordance with their philosophical wishes, carry with them the meaning that schools must not use corporal punishment if this offends the parents.

By tradition, the English have always been sceptical about abstract rights, preferring to place their faith in smaller, more manageable laws and less cumbersome remedies. But many commentators have noted how this is changing - partly as the result of organic links with Europe, partly because of a greater readiness on Parliament's part to make specific procedures which had hitherto been informal, and partly because of the intervention of the Court of Appeal and the House of Lords in settling the exercise of administrative power to judicial review.

It is, in fact, very easy indeed to be sceptical about the nature of the Strasbourg judgment, even if (like *The TES*) you see it as another welcome milestone along the road to the ending of corporal punishment. To say that pub-

lic authorities should establish as many different kinds of school as there are different parental philosophies would be palpably absurd. It would be absurd now to suggest that each local authority should pull all its parents and divide the children between heating and non-heating schools in the same way that they are now divided between church and non-church and mixed and single-sex schools. Quite apart from the expense, the upheaval would be quite unacceptable because of the damage it would do to the education of all the children.

This judgment may have opened up the way for other groups of parents to take their philosophical convictions to Strasbourg - the pro-sex-educationists and the anti-sex-educationists, the evolutionists and the creationists, the comprehensivists and the non-comprehensivists. No doubt the Court itself would soon come to resist their argument and restore the balance. (The Court has already refused to uphold Danish opponents of sex education). What has happened can be seen as evidence at the European Court of a phenomenon already apparent in this country - the desire to settle

at law matters hitherto thought to be resolved by other social and political means. All this, however, remains highly speculative and there is no reason why, just because Strasbourg has produced a dubious judgment on this matter, it should be assumed that the Court will necessarily go on down this path. The fact is that, in the eyes of the British, the British were not the greater part of it - has abjured the law and cannot really understand why the teachers should want to hang on to it. The Irish Republic has decided to stop without waiting for Strasbourg, the Scottish State for Scotland has already told its education authorities to move to end caning by 1984. And in England, too, the movement among i.e.a.s to end caning has gathered over the past two or three years.

The judgment of the Human Rights must strengthen this trend. It is much more acceptable to the best grace that British can muster, than to fight what in context it would be inappropriate to reargued action.

Comment

Salami tactics - carry on slicing

Hereford and Worcester's spending cuts are savage by any standards. They cannot fail to eat into the efficient working of the schools - unless, that is, it is claimed that the staffing levels which are now to be cut, were formerly too high. The fact is that a combination of extraneous circumstances - and most notably, Mr Heseltine's penal grant system - has forced the county to make swingeing cuts which would never otherwise have been contemplated. It is hardly surprising that the National Union of Teachers should be concerned at the loss of 900 jobs in three years, out of a teaching force of only about 6,500.

Music tuition is still in doubt. It will not be known till next week whether the county will go ahead with a plan for a trust fund to subsidise music teaching fees for individual tuition outside the main curriculum. No doubt the unions will be watching the situation closely. It would not be surprising if they decided to put pressure on the authority in an attempt to draw attention to the severity of the cuts and the threat they must cause to the education of the pupils in the schools.

Because education budgets are the responsibility of more than 100 separate local authorities it is difficult to focus political opposition. The salami goes on being sliced, but no single cut can be shown to be particularly worse than the one before, or the one which will come after. But it must be asked why people who live in Hereford and Worcester should be offered an inferior educational package to that available in some more free-spending areas. In particular, why should access to instrumental tuition depend on the vagaries of a trust fund and covenanted subscriptions in Hereford and Worcester while young musicians in more favoured areas get the sort of deal which produces large-scale participation in high-quality music making?

The disparities are unfair. They are also damaging. The Secretary of State uses them to justify his refusal to intervene in defence of educational standards. If any group of parents complains (in Northampton or in Surrey) Sir Keith can always find in the recesses of the education system some other school or district where things are worse, thereby excusing his own inaction. The truth about Hereford and Worces-

ter is not that the local authority is uniquely delinquent, but that the county is being ground down by the pressure of Government policy and, itself, grinding education down in the process.



Schools of the future...

At least when it comes to gadgets in schools, we live in a marvellously exciting world for children - and a daunting one for an average, humane, and microelectronically illiterate teacher. The articles on pages 31-42 show both the challenge and the potential of this world of microprocessors and interactive information networks. It will be no straightforward task adapting this incredibly powerful technology to the deeper aims of education.

Jeff Taylor's article (page 42) raises some key questions about software. Anyone who has seen many educational computer programs will agree that bad software can dictate inappropriate teaching styles and content, make computers even more mysterious to children, and promote highly dubious ethical and social values.

There is no doubt that of all the people involved in the use of computers in education, Sir David Butler has produced the most stimulating and exciting vision of the future. His article (page 31) is a good idea of the potential of computers in education, but it is put directly under the control of the local authority.

Cheaper computer hardware and the spread of new software packages and languages should rapidly make it possible for schools to move from the early, electronic workcard, stage to something much nearer the Papert vision.

But if that is to happen, it is vital that large numbers of ordinary teachers, whose subjects and skills would not naturally endear computers to them, find out what is possible, and seek to influence what is happening. Luckily the obvious enthusiasm and competence of children when they are brought into contact with the new technology should make their teachers' struggle to come to grips with it more fun, and more worthwhile.

Top-down or bottom-up?

The usefulness of the Cockerill Report on maths teaching will be much diminished if its full implications are not reflected in any reform of mathematics examinations at 16 plus.

Critics of the draft criteria circulated by the exam boards' maths working party (page 6) are calling for major changes to take account of Cockerill and its curricular recommendations. The exponents of the draft criteria, on the other hand, claim to have had advance information of what the Committee would say, and to have taken this into consideration in drawing up their proposals.

What is important, however, is not only Cockerill's actual words of wisdom, but also the way in which they have been received by informed opinion in the schools. First impressions are that Cockerill has gone down well - that it has secured a wide measure of agreement, and that this agreement will in itself be an important ingredient in future changes. Cockerill may have paved the way for more penetrating reforms than those modestly set out by the working party.

In particular, the Cockerill idea of a foundation core, which those at the bottom of the relevant ability range should be able to tackle, is different from the broader notion of a common core adopted by the working party. Some people, such as Mr Don Harlow, the Royal Society's education officer, see a sharp contrast between the Cockerill attempt to build from the bottom up and the working party's top-down approach. A watered-down version of the traditional academic curriculum must be exactly what the less able pupils don't want.

It is, of course, the achievement of Dr Cockerill and his colleagues to bring these issues to the forefront of discussion. Now is the time to thrash them out, if the 16-plus exam reform is to be made the vehicle for the overdue changes which are now possible.

Sniping at the Tebbit scheme

Opposition to the Government's Youth Training Scheme seems to be forming up along opposite lines. From Labour and the trade unions (with the support of the training establishments on the employers' side) it takes the form of rejection of the narrow concept of a programme aimed primarily at the young unemployed, and an insistence on a training and work experience package which extends to all the 16-18 age group, embracing traditional apprenticeship as well as new forms of vocational preparation.

A different line of attack comes from the market economists who argue that all that is needed to get young people back into work is to reduce their price to the point where an employer cannot afford not to employ them. This line is taken by the *Economist* in its article in last week's *Economist* contrasting Germany and Switzerland, where young people are trained and employed, with the UK, where they are unemployed. In Germany, apprentices get 60-75 per cent of adult wage; in Germany 20-30 per cent, and in Switzerland (can this be right?) 17 per cent. It is the reasoning behind Professor Alan Walters' young worker scheme which offers employers a £15 a week subsidy for an under-18-year-old taken on at less than £40 a week.

The possible variants on these schemes - the one creating employment not training, the other follows it would be because the Government wants to provide it for his own needs - are being explored by Professor Richard Layard outlined one of them in the *Financial Times* last week - a job scheme in which he reckoned could create 200,000 jobs at a cost of only £500 million to the Treasury. The Sector Borrowing Requirement. He explained how this would avoid displacing older workers. The Walters' subsidy raised to £30 a week for all under-18s, not just some of them. "We won't," he wrote, "we shall end up with most of the youth as state pensioners in the Youth Training Scheme costing £60 a week."

No Comment

The extraordinary coeducational school, which has been in the news for some time, is now being the principles of Rousseau and Montessori, allowed pupils to participate in decision-making. More remarkably, it is also being used as a farm, and it was there that the first seminar was first pioneered in the UK. From Routledge and Kegan Paul's *School Catalogue* blurb for *The Ethical School* by Michael Young.

Ruling hits students

by Hilary Wilce

A growing number of unemployed young people in Newcastle are dropping out of part-time college courses because their supplementary benefit is being withdrawn under a harsh new ruling from the Department of Health and Social Security.

The situation in Newcastle is the first large-scale evidence of how the new guidelines are being interpreted on the ground. The indications are that the strictest possible judgments are being made. Many thousands of students across the country are likely to be affected if other local benefits officers follow the same pattern.

Local benefits officers are systematically reassessing the situation of part-time students. Since the beginning of this term about 60 students from the Newcastle College of Arts and Technology have been called in for reassessment. About half of them have had their benefit withdrawn and a significant number have since dropped their studies.

The new ruling says that although young people who are registered as unemployed can study for up to 21 hours a week and still claim benefit, this 21 hours must be interpreted to include lunch breaks and private study.

A circular to Newcastle heads from the education authority says the ruling makes it likely that only part-time pupils on specially-designed 21-hour courses for the young unemployed are likely to continue to receive benefit.

About 500 students at the Newcastle College of Arts and Technology could be affected by the new guidelines. Mrs Norma Britain, student adviser, said that where a student had classes from 9 a.m. to 11 a.m. and then from 2 p.m. to 4 p.m. the hours from 11 a.m. to 2 p.m. were being counted as study time.

3,000 for primary retraining

by Bert Lodge

Up to 3,000 secondary school teachers will be on full-time courses retraining for primary work by 1984, according to a new confidential government plan for meeting the shortage of teachers of the under-11s expected from the mid-80s.

The plan, which has been seen by the Government's Advisory Committee on the Supply and Training of Teachers, will also cut the output of secondary teachers from PGCE courses by 40 per cent for at least the next seven years, close down some teacher training courses, and reduce the BED degree to a qualification only for primary teachers and one or two secondary specialists.

A big switch of PGCE courses from secondary to primary training is also planned.

The move to re-train secondary teachers for primary schools is understood to have provoked heated discussion at the meeting of the ACSET teacher-training sub-committee. Spokesmen for secondary teachers argued that they were flexible to re-training, but champions of the primary sector took the attitude, "we don't want those you want to get rid of".

Although the plans also allow for an increase in the BED primary in-

The committee is believed to have been generally agreed that one term, the period proposed for the conversion course, was not long enough.

The problem is how to cope with a demand for primary teachers which will rise from 4,100 in 1985 to more than 9,000 by 1990 and stay there in the 90s. At the same time the demand for secondary teachers will decline from 5,200 in 1985 to 3,500 by 1989, but then triple during the 90s.

The DES proposes that the cut of 20 per cent in PGCE intake imposed by Sir Keith Joseph for next year only should now be extended for the rest of the decade. At the same time the universities should double their output of primary teachers to about 1,000, the PGCE courses providing 800 and BED courses 250.

In the maintained and voluntary sectors the primary and PGCE output should be doubled to 2,200.

The switch of emphasis from secondary to primary plus the reduction of 20 per cent in intake will mean a 40 per cent reduction in PGCE-produced secondary teachers until 1990.

Although the plans also allow for an increase in the BED primary in-

take of 15 per cent this will still leave some courses undersubscribed. In the Government's own words: "We believe that fewer establishments should be involved in teacher training, offering fewer options to a larger number of students."

"The weeding of weakness is now possible."

This will put at risk particularly those university department of education unable to make a large scale conversion to producing primary teachers. University departments will be allowed four years for the transition and departments in the maintained sectors five years.

The DES points out that four BED subjects - home economics, PE, business studies and craft - provide the major share of the total output of teachers from all sources. If half the current intake of 2,000 secondary BED places was converted to primary the remaining 1,000 places could be shared among about 80 subjects. This would mean about 80 per cent of all BED graduates from the late 1980s would be primary teachers.

The reduction of the BED to virtually a primary qualification will dis-appoint teacher unions which have fought to maintain its status.

Jenkins confirms pledge on independents

by Biddy Passmore

Mr Roy Jenkins, SDP candidate in the Hillhead by-election, has confirmed his party's commitment to the retention of independent schools, but has left unclear whether it would continue the Government's assisted places scheme.

Speaking at Glasgow University last Wednesday, Mr Jenkins said: "I fully accept that the right to opt out of the State system is a legitimate human freedom. Independent schools exist because a sufficient number of citizens freely choose to spend their money in this way. Our acceptance of that fact does not dispose us towards the Government's new scheme."

Mr Jenkins made a stinging attack on the cuts in

higher education. It was not merely unwise it was "near madness" to cut back while the population of those between 18 and 23 was at its peak, he said.

Mr Jenkins steered a delicate course on parental choice of schools. Rigid catchment areas should not invariably take precedence over the desires of the people the system was created to benefit.

However, he described the Government's claims for its Parents' Charter as "an example of the hyperbole and exaggeration of partisan claims which play so large a part in our political system". The plain fact was that some schools were more popular than others and attracted children.

Anger over letters

by Liz Taylor

Teachers in the Borders region of Scotland are angry about letters which were sent out to a number of their colleagues by the region's education department, asking why they did not turn up to school on certain days during the recent bad weather, which was the worst in living memory.

The letters were sent direct to Mrs Margaret Clark, the Assistant Director of Primary Education. Not only did they ask why the teachers had failed to attend school but they also suggested that teachers should either live near their places of work or else find alternative temporary accommodation when the weather was bad.

Mr Mike Elmitt, Chairman of the Borders Headteachers' Association, said: "Many of those letters were directed at the most faithful members of staff. I know of one case where the teacher involved had to help dig out the lorry that was clearing the road. There was no way she could have got to school. Another teacher explained that this absence was on the day there were burst pipes in his home and he stayed to help his wife and family. It was not unreasonable to put his family first in those circumstances."

The teachers have been particularly offended by the suggestion that they should live near their schools or find digs during bad weather. "The teachers are very upset about this," said Mr Elmitt.

Mr Donald Gordon, the region's deputy director of education, explained: "The letters were sent out because there were a number of questions asked by parents and by head teachers during the bad weather. People were very concerned."

Surprise vote on merger

by Patricia Santinelli

A surprise vote by Bradford Council's ruling Labour group has thrown the proposed merger of Bradford and Valley Colleges into the melting pot. The Labour group's decision failed to be ratified by a special education sub-committee, but is to be considered by the further education sub-committee today.

The decision by the City's Labour group which was taken by a vote of 14 to 8 has angered both staff and students of the two colleges who this week lobbied both meetings of Labour and of the sub-committee in an attempt to get the vote overturned.

The merger of the two colleges has been the subject of lengthy discussions for nearly a year. It was assessed and finally recommended by two working parties even after allegations of prejudice, as the best way to ensure the future of higher education in the district.

Staff and students at Ulsley College are particularly worried because they fear that if the merger does not go ahead the college might be forced to close.

Meanwhile Mr Eric Robinson, the principal of Bradford College, who has been at the centre of a row over the appointment of a principal for the merged institution, has issued a statement addressed to council leaders.



Eric Robinson... statement on new college post

This says that he was anxious and willing to be considered for the post and that he was hurt and shocked when the council took the decision to advertise the post externally.

"This decision constituted a public statement of no confidence in me. The way the council is dealing with the post is unfair to me and could lead to my unfair dismissal." (THE)

Still stalemate at pay talks

Pay talks for teachers were still at stalemate this week despite a second meeting on their 12 per cent pay claim.

i.e.a.s are reluctant to budge from the 3.4 per cent offer they made two weeks ago. If the deadlock is not broken it is likely to be left to the teachers' unions annual conferences at Easter to decide what to do.

Meanwhile a claim for a 13.8 per cent increase in the allowances paid to teachers in and around London - from £1,000 to £1,164 a year overdue - is to go to arbitration.

Student protest at Commons

Britain's students conducted a nationwide campaign this week in protest against the Government's planned 4 per cent rise in their grants this autumn.

About 250 student delegates and unemployed young people lobbied MPs at the House of Commons on Monday to demand better support for the young in further and higher education and training. Their demand met sympathetic responses from Mrs Shirley Williams and Mr Neil Kinnock, Labour education spokesman.

Manchester cut is less than planned

Manchester's education system is to be cut by only 6 per cent next year instead of the 15 per cent which was originally planned.

But all sectors will be badly hit. In addition, the education department has to find a further £2.2m savings by March next year, through early voluntary redundancies and natural wastage of staff.

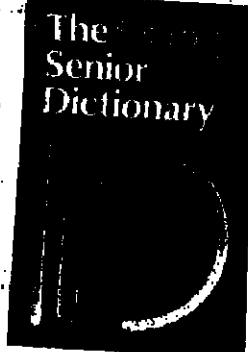
Last week the city's budget resources subcommittee voted for an education cut of £7.4m - the largest amount it could go for while avoiding compulsory redundancies. Cuts in rents and rates are to be increased to keep spending cuts below the original target. As a result, school meals will go up between 5p and 45p, spending on textbooks and equipment will be held down, and pupil-teacher ratios will rise from 1 to 15.5 to 1 to 16 in secondary schools, and from 1 to 22 to 1 to 23 in primary schools.

Clothing and maintenance allowances and cleaning services are to be cut back. Primary children will be able to have swimming lessons only if they can walk to the baths as transport has been cut, and schools are to save on heating costs by closing for an extra week at Christmas and staying open for an additional week in the summer.

Further and higher education services are to be cut by £2.8m, although no colleges are to be closed at this stage. Reviews of the future of the City of Manchester Higher Education College, and of possible amalgamations of further education colleges, are underway and decisions are expected by the summer.

Manchester parents protesting against the city's compromise proposals to reorganize secondary schools into a mixed system of 11-18 schools, 11-16 schools and sixth form colleges travelled to London to meet Dr Rhodri Iwan Jones, the junior education minister, this week. They gave him letters for the Education Secretary which roundly condemned the proposals.

Top of its class The Oxford Senior Dictionary



★ A new, modern and readable dictionary for secondary school or college students.

★ 45,000 words and phrases defined giving comprehensive coverage and excellent value for money.

★ Contains the specialist vocabulary - including scientific and technical language - needed by students at O-level/CSE standard.

★ Includes appendices on chemical elements and countries of the world.

Publication: 1st April

768 pages 0 19 910221 X £2.50
(A jacketed edition is available: 0 19 910222 8 £3.75 net)

Please send me an inspection copy of *The Oxford Senior Dictionary*.

Name
School
Address

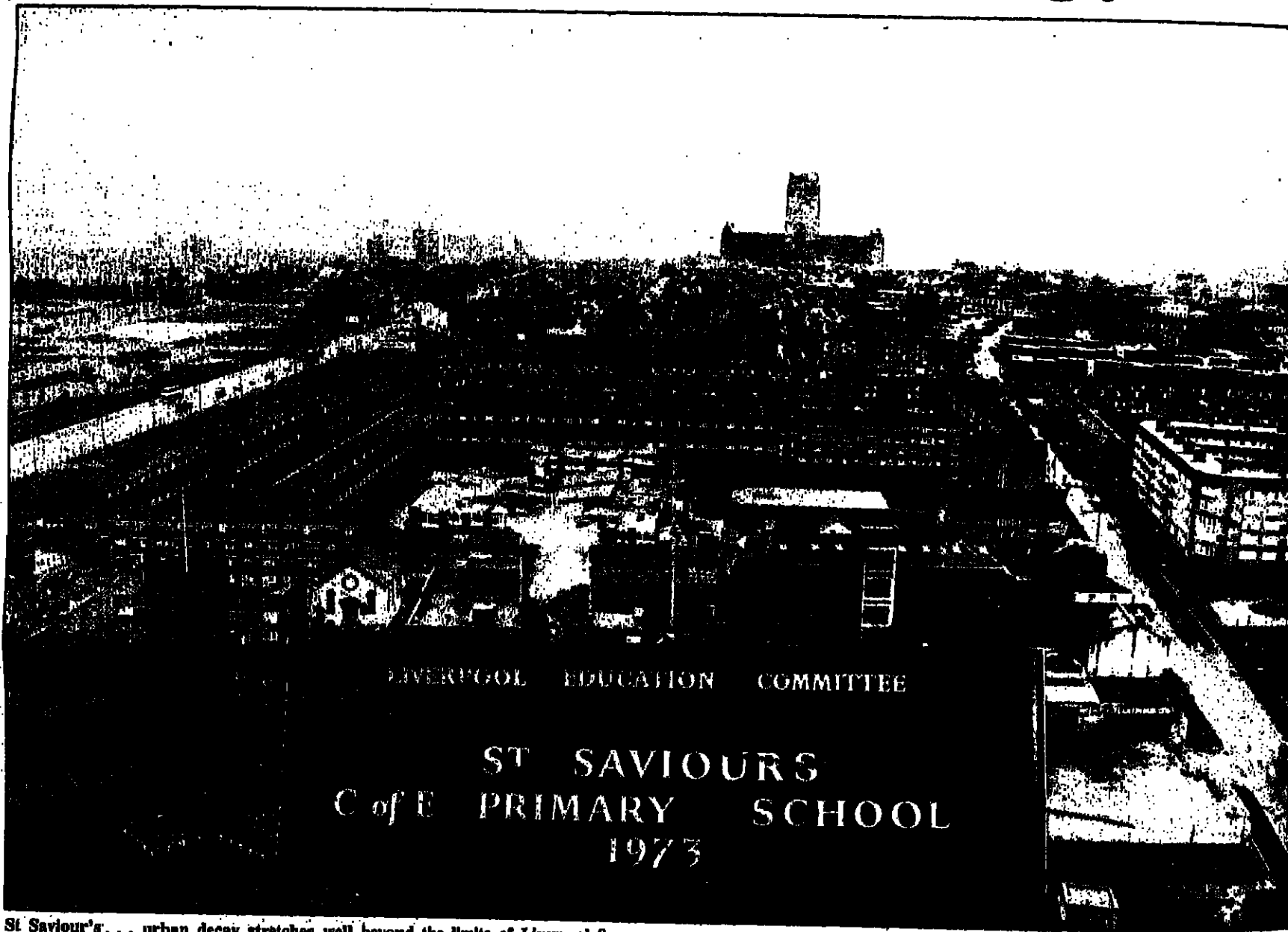
Please return to Oxford University Press, Education Department (EBL 285) Walton Street, Oxford OX2 6DP.

Oxford University Press

Platform

In the aftermath of the temporary breakdown at St Saviour's primary school, Christopher Schenk suggests teaching styles can make a difference, even in deprived areas of Liverpool

The good, the bad and the ugly



St Saviour's... urban decay stretches well beyond the limits of Liverpool 8.

Less than an hour's drive away from the centre of Liverpool, just over the border into Wales, there is a collection of wooden huts on a green hillside called Colomandy Field Study Centre, where generations of Liverpool children have come with their parents for a week in the Welsh countryside. Each week half a dozen or more schools share the facilities. They share the dormitories, the classrooms and the environment, but each school brings with it its own teachers, its own attitudes, its own particular brand of discipline and its own atmosphere. As you watch the different school parties setting off in the morning you can see clearly the tremendous contrast in approach. In some party the children are dressed in formal school uniforms, in others they are in casual clothes, in some they are laughing and shouting, in others they are silent and serious. They are all going to the same place, but they are all going there in very different ways.

Back in Liverpool the contrasts remain and it becomes obvious that they are not directly related to the sharp differences which exist in the children's home backgrounds. Schools only a few streets away, serving very similar catchment areas, are sometimes a world apart in educational outlook.

The buildings themselves vary enormously from gaunt Victorian monstrosities with high ceilings and echoing corridors, to compact, modern, open-plan schools, whose design is based as much on space-saving and cost-cutting as on educational principles. But the exterior look of the school is no guide to the interior atmosphere. One small junior mixed and infant school, tucked down a side street near the very centre of the city, still has "Board School" written up in large letters, and from the outside looks at least a 100 years out of date. Once inside and up the gloomy staircase, the impression changes. The head and teachers have contrived to create a pleasant and welcoming school inside a magnificent Victorian building.

Another huge, three-decker red-brick school, with a tiny asphalt playground and not a blade of grass, has the stairwells and wide corridors full of plants and decorated with children's work. The brick wall that encloses the playground like a prison enclosure has been refurbished by volunteers' labour and made into a parents' room.

What must have been most difficult to bear was that some infants from the school were involved in the incident. It takes great courage to recover from a set-back like that and to continue to believe that the overwhelming majority of the children need and deserve a stimulating environment despite the destructive actions of a small number of highly disturbed children. Small wonder that some teachers and some schools appear to have given up the battle.

There are, sadly, some schools in the deprived areas of Liverpool where the external environment of urban blight is all too accurately reflected in the attitudes and discipline of the school and its curriculum. These are schools who believe that the odds are so stacked against them that the only way they can remain sane is to become nine-to-four instructors and policemen, maintaining a rigid but uneasy control over their classes as they administer a diet of English exercises and mechanical arithmetic. One can understand how teachers have come to this position but it does mean that many children with a great need for security, affection and stimulation are finding none of these things in their school.

In the wake of last summer's riots, attention has focused on Toxteth, but urban decay is not confined to Toxteth. In Merseyside, Liverpool 8, beyond the limits of the inner city at all but in the resettlement areas around the periphery, places such as Speke, Cantrill Farm or Kirkby. On one such estate there are two schools within walking distance of each other, both of which make great efforts to meet the needs of the children and the community, but each school goes about its difficult task in a very different way. On a formal-informal continuum the two schools would be placed a long way apart yet they are both successful in the face of considerable problems. Their success is based on something more fundamental than their particular methods of organization and teaching. One school may seat the children in straight lines; the other may group them around tables. One may expect almost complete silence during lessons; the other may permit a considerable amount of talking. Both have staffs who care about the children in their work; both try hard to work with parents, rather than laying all their problems at the parents' door.

It is only in Toxteth, however, that there are many schools with a sizeable proportion of black children. Many Liverpool blacks come from families that have lived in the city for generations and have been settled for some time in and around Liverpool 8. Within a small area there are families of West Indian, African, Indian, various European and Chinese descent as well as a number of people of mixed race. The reaction of the schools to this racial and cultural variety is very different. Some schools see their multi-racial intake as yet another problem. Others feel

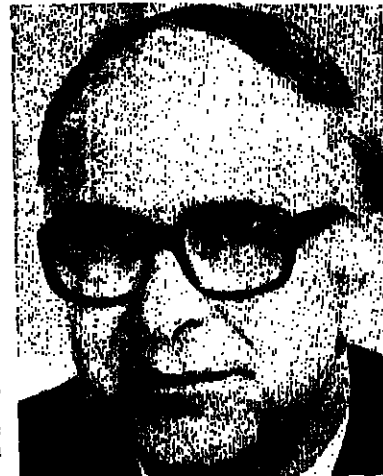
that the school's role is to treat all children alike, regardless of differences in cultural and religious background. A few schools take the diversity of their children's backgrounds as a positive advantage and make use of the opportunities that diversity presents. One school in particular, again housed in a rather unimpressive building, could be said to have almost its entire curriculum built from giving interviews. We would be welcome back in six months by its multicultural intake.

In the 1960s there was widely held optimism that education could bring about changes in society. In particular, in Liverpool, the idea of compensatory education was much discussed and social and educational priority areas were set up. The use of resources to these areas was much more than a trickle, but although it can be argued that compensatory policies have never been properly tested, the optimistic assumptions behind such policies have evaporated. In their place is a cynical view that there is nothing that schools can do to counteract large parental influence or other socio-economic factors. While it is true that schools cannot by themselves stand out against powerful outside influences, styles of teaching like styles of polling, can sometimes potentially explosive situations of they can exacerbate them.

Christopher Schenk was a lecturer in primary education at the University of Liverpool from 1977 to 1980. He now teaches in Oxfordshire.

Sarah Bayliss reports on the first moves to tackle the problems of Liverpool 8 and looks at the future role of parents

Education officer shares blame and launches recovery plan



Mr Kenneth Antcliffe, Liverpool's chief education officer, this week shouldered part of the blame for the breakdown in discipline at St Saviour's Church of England primary school in Liverpool 8. The authority had not taken heed of some danger signals, he said.

Mr Antcliffe, who has instigated a ten-point recovery plan for the school, expressed his frustration at the complexity of a "hung" city council which prevents agreement on a policy for supply teachers being sent into Liverpool schools. In an interview with *The TES* he described the process for appointing permanent staff as "elongated" and dependent on unanimity among the three political parties which share power in the city. It is widely known that St Saviour's suffered from both ills. The school secretary, whom parents say was seriously injured in a car accident last December and had not been replaced until this week after the school's crisis.

Mr Colin McLoughlin, the headmaster for the past 31 years who has requested early retirement, was replaced by Mr Peter Pritchard, who was off sick with high blood pressure. Indiscipline boiled over when Mr McLoughlin had to leave his class unsupervised to answer the telephone. A fire of books and paper was started in his absence.

Mr Antcliffe said this week: "There was undoubtedly a breakdown in discipline, and quite frankly we should have identified the problems and picked them up when the school first started to drift. The governors should have been more on their toes too."

Mr Antcliffe said that having analysed the situation the authority realized it had allowed the staff to "take the wrong shape." Six teachers left last year - three for promotion

and three to have babies. They were replaced by Scale 2 teachers, but their experience was largely confined to infant teaching.

"The junior children are of an age that needs something much more. If kids get bored they misbehave," he said.

Mr Antcliffe stressed that he had more than 300 schools to administer, and could not confirm a claim by parents that the top two classes at the school each had four different teachers in the last year. He agreed that the authority should have acted earlier to close off sections of a school which has 110 pupils, but which was built for 350. Under the recovery plan the junior department has been closed off, but should reopen as a parents' centre. Parts of the playground have been fenced. The recovery plan does not include the expulsion of pupils. "We don't see that as a solution. We have a statutory responsibility to educate a child, and if one is expelled then we have still to teach it at another school," Mr Antcliffe said.

Wiping the slate clean

All was quiet at St Saviour's on Tuesday afternoon. There were no press conferences, no Merseyside security patrols on the gates and no Liverpool 8 Defence Committee members "defending" their community against the Fleet Street invasion.

Two men were asphaltting the roof, another was putting up a fence. Outside the secretary's office a little girl was having an Elastoplast put on her grazed knee.

Mr Arnold Cowman, the new acting head, greeted me apologetically but with a broad toothy smile. "I've had enough tensions to be going on with," he said, explaining that the council's "standing orders" prevented him from giving interviews. We would be welcome back in six months time.

On Monday at the end of his first day Mr Cowman had described to a press conference the unease with which lessons had started.

"There was an unreal atmosphere. I would have been worried if there were not, because it would have meant that the children were inhuman."

Restoring discipline would be a slow process. "We must take each day as it comes."

Mr Cowman has taught for 30 years in the Toxteth area and was head of Toxteth primary for ten years until last July when the school was closed.

St Saviour's... a symptom of poor government

As the dust settles at St Saviour's, speculation on the causes will continue. Was it just further confirmation of Merseyside's drift to inner city lawlessness or cash starvation in the wake of education cuts? Mrs Margaret Simey - school governor, county councillor and Police Authority Chairman - passionately refutes popular explanations.

At the root of such extreme outbreaks, according to Mrs Simey, lies the failure of government in urban areas. While she pinpoints particular problems contributing to an escalation of trouble at St Saviour's as lack of parental involvement and rapid staff turnover, she sees this as a failure of the education authority to lay down firm guidelines and act with political commitment. "It's not lack of bright ideas, good intentions or money - we just haven't the basic skills of good government," she says.

Only 13 years ago the same neighbourhood of Liverpool 8 in Toxteth was a national showpiece for the potential of community involvement in primary schools when Eric Midwinter worked on the Educational Priority Area experiment. Mrs Simey despairs that the message of Midwinter and the EPA to use parents as the starting point for running all inner city schools has been "allowed to die".

Mrs Simey has lived in the heart of Liverpool 8 for 60 years, for many a councillor on the Education Committee. Now as a Labour county councillor she became chairman of the Merseyside Police Authority just weeks before the July riots which she herself had sadly predicted.

Three extra teachers have been put into the school this week, and there are specialist teacher advisers in many subjects on hand. The curriculum is to be developed along multi-cultural lines with the help of the city's multi-cultural adviser and a colleague to be appointed soon. The school had £1000 worth of books and equipment delivered this week. "My understanding from the mums is that the kids are delighted with all the stuff they've got," Mr Antcliffe said.

Agreeing that the school's capital of £13,500 was £2,200 underspent, he blamed a typists' strike which paralysed the city's administration for six months and delayed book orders in many schools.

Mr Antcliffe emphasized his concern about the need for more supply teachers. "I agree with the unions on that point, but not on their tactics," he said. The National Union of Teachers this week announced that a majority of members had voted to provide "no cover" in Liverpool schools when staff are absent.

"In the absence of unanimity on the council there is minimum supply cover. It is extremely difficult for primary heads if a teacher goes away. Classes have to double up or the head takes on a full teaching load."

Liverpool has the most complicated council in the country, a city council officer admitted this week. Since May 1980 there have been 40 Labour members who have refused to take power and 38 Liberals who are in control, with the agreement of 21 Conservatives. The typists' strike meant the education committee did not meet between June 1981 and January 1982. There was no education committee held to set policy after the Toxteth riots in July.

Mr Antcliffe was suspended for 10 months last year pending an inquiry into losses of £278,000 on the Liverpool centenary celebrations. He was reinstated in November.

Robert Davies talks to Margaret Simey

She draws parallels between the challenge to inner city schooling and the problems which confronted her police authority. They presided over a force of 4,500 with a budget of £84m, facing violent mass rebellion in the community.

Evidence that listening brings results is to be found in other Liverpool 8 primary schools which operate Parent Support Schemes. The effect is that parents, neighbours, shopkeepers and politicians constantly drop into school.

She sees both dangers and merits in closer liaison between police and schools. "We don't want children reared by the police," which she fears is a disturbing aspect of society's growing expectations that the police should mop up every social problem presented.

Merseyside Police Authority has taken a lead in setting a policy framework for public consultation as one of many measures which Mrs Simey hopes will eventually change the context of inner city policing. Since the riots in July a *Meet the People* exercise has resulted in 11 local meetings and a discovery that people started you can't stop people saying what they want from the police. "Never before has anyone listened," Mrs Simey adds.

Getting parents involved in the education of their children was established as the top priority at St Saviour's school this week.

Last night a new parents' association met for the first time, and high on the agenda was the need to elect parent governors something which this Church of England school has never had.

The parents have revealed a damning history of the school. They claim it never had open days and that it was "difficult if not impossible" to contact the former headteacher, Mr Colin McLoughlin, or individual members of staff.

In a paper written for other parents earlier this week they wrote: "We were only able to speak to the school secretary". No surprise then that problems at the school escalated in December after the school secretary was seriously injured in a road accident and was not replaced because of Liverpool city council's jobs freeze.

On pupils' behaviour the parents wrote: "If there are behaviour problems then it's up to the school to contact the parents. This was never done."

Father Douglas McKillick became a governor at the school five weeks ago. He arrived in Liverpool 8 at Christmas from Deptford, South London, to be team vicar of St Stephen's parish which now covers St Saviour's. The former vicar of St Saviour's, which has been demolished, had resigned as chairman of the school governors.

Father McKillick says he was "appalled" to learn there were no parent governors. "There are a lot of good hearted people here who want to be involved. There's no doubt they've had a bad deal from the school. They were not made to feel welcome."

Aged 22 and dead happy to be back at school

Eileen Omar left secondary school in Liverpool 8 aged 16 and with no qualifications to her name. A year later she married a merchant seaman and at 18 she had a baby boy, Aris. "Lots of people said it wouldn't last. But it's worked out. I'm dead happy," she said.

Eileen has pleasant memories of her early school days at St Saviour's in Crown Street. "That Mr McLoughlin was a lovely man. It's a shame what they're saying about that school."

But at secondary school she was bullied, and by the fifth year she was a regular truant. "I was at that funny age. I didn't listen to my teachers. I didn't give a damn."

Today Eileen is 22 and is back at school - a model student. She is one of many parents involved in the parents' centre at Kensington primary school in Liverpool 7.

While Aris, aged 3, is in the nursery department for five half-days a week, she is studying O level English language in the parents' centre and maths at a local college. She has been accepted for a course in five O levels starting at the local tech next September.

"When I first moved here last year I kept myself to myself. Everything I've done since is down to the centre," she said.

The Kensington scheme is one of 17 parent support units pioneered in Liverpool two and a half years ago. If the Department of the Environment gives the go-ahead 10 more units will be set up in 1982-83, paid for jointly by the local authority and the inner city areas partnership programme.

He says the blame for what happened at St Saviour's must be "spread out," but he lays a sizeable portion at the door of the diocesan board of education. "The church was simply not on its toes here."

Last Saturday morning Father McKillick and Mrs Pat Lashy, chairman of a local residents' association and mother of four, went uninvited to the home of Mr Kenneth Antcliffe, the director of education. He welcomed them, and the next day returned the visit. He joined parents for Sunday lunch in Mrs Lashy's flat.

That, says Father McKillick, laid the trust for a successful meeting with over 90 parents on Monday night, the first day back at school. "It was an extremely constructive meeting. I am full of hope for the future."

At the one and a half hour meeting, from which press were excluded after a show of hands, Mr Antcliffe and the acting chairman of governors readily agreed there should be parent governors. All the county schools have had them since 1964.

Mr Antcliffe also agreed that the new parents' centre should be "staffed by local people with knowledge, experience and commitment", and gave an assurance that "steps would be taken to ensure that the teaching staff is experienced, competent, permanent and stable."

In addition he suggested that, with the help of parents, the school might provide children's breakfasts to help them to get to school on time.

Mr Arnold Cowman, the new acting head of the school, asked how many parents were at home in the daytime. There was a large show of hands, and he offered to invite parents from each year group to the school soon.

St Saviour's centre starts by Easter. The cost of establishing the unit in a couple of spare classrooms will be about £6,000 with running costs, including two salaries, at about £17,000 a year.

"I don't believe in throwing money at problems but I know this is really cost-effective education," said Mrs Walsh, head of the Kensington infants' department with overall charge of the parents' centre.

Based in a former church hall in the same site as the red-brick Victorian school, the centre's most flourishing activity is the thrice weekly mother and toddler group, which last Monday had 47 adults, including a handful of fathers, and their children.

Lynda Robinson was a teacher at the school and returned as "teacher-worker" when the centre was opened. Rose Robinson is an "out-reach worker" who spends a lot of time in parents' homes.

"The idea is to educate the parents to educate their children," said Miss Elizabeth Stanton, head of Holy Cross and St Mary infant school, which has another thriving parents' centre.

There is an impressive range of activities at the Kensington centre - English literature and language, dressmaking, cookery, machine knitting (three mums have each bought their own machines), keep fit, French conversation, art and craft.

There is a singing club, a drama workshop which also involves junior pupils and staff after school, and cookery held by mothers with junior forms. Last autumn there was a weekend trip to Paris.

Apart from giving parents "a second chance" the direct benefits to the school are enormous. "There's no mums standing at our gate saying 'I wonder what goes on in there'," says Mrs Walsh.

It's a boys' Maths bodies united in row over exams

by David Lister

Sex discrimination is rife in British schools, according to a new book charting the recent history of the feminist movement.

The book, *Sweet Freedom* by Anna Coote and Beatrice Campbell, says that it is "abundantly clear that teaching materials reflect and reinforce traditional sex roles, from early reading schemes to advanced books on history and geography. Women's contribution to production and their role in society are rarely given proper acknowledgement."

The authors cite research that says that teachers spend more time talking to boys and allow boys to talk more, and they say: "It is not that teachers are lying when they say they don't discriminate against girls. They operate in a social system which perceives preferential treatment for males as the norm, as the status quo, and therefore find such practices fair."

Arguing for a common curriculum up to a certain age, the authors say: "The purpose is to stop girls dropping out of subjects such as physics before they have had a chance to find out about them. Here again the vocabulary of liberalism is deployed in defence of the status quo."

"Opponents of a common core curriculum raise the spectre of 'Big Brother' imposing dreary and dangerous uniformity and curbing the virtues of 'individual choice'. Likewise, suggestions that sexist books should be banned or at least energetically discouraged are met with accusations of 'censorship'. Attempts to change what is 'normal' are condemned as 'social engineering' - the Big Boy of the educational world."

"What is neatly sidestepped in this argument is the fact that schools have been engaged in a massive exercise of social engineering for well over a century."

Sweet Freedom: The struggle for women's liberation. Picador, £1.95.

Milk Shaker

Fears that milk makes children fat may make Gloucestershire County Council turn down funds from the Common Market to subsidize school milk. The recommendation not to take up the subsidy will go before the county's education committee later this month following advice from a local doctor.

by Bob Doe

A row has broken out over how far the plans for the new 16-plus exams in maths do, or should, follow the proposals of the Government's Cockcroft inquiry into the teaching of mathematics.

A substantial weight of professional opinion is seriously at odds with the suggestions for the new exams made by the exam boards' maths working party. These proposals seem to have united the several bodies with an interest in maths teaching for the first time.

Members of the Cockcroft Committee are also very unhappy with the boards' proposals though most of them are maintaining a diplomatic silence in the hope they can still influence the final version.

The boards' 16-plus maths working party met the Cockcroft Committee for an exchange of views before either the Cockcroft Report or the combined O level and CSE maths exam proposals were published.

Dr William Cockcroft, who headed the official enquiry, said this week, "I hope the working party will review their document in the light of our report. There is much more in detail now for them to consider."

But the chairman of the working party, Mr Jack Billington, said "The

Cockcroft proposals are fully in line with the criteria we have suggested." Both had accepted that it was not desirable to set the same maths papers at the age of 15 or 16 to all children.

But this view of an agreement between the 16-plus criteria and Cockcroft is not widely shared among mathematicians in general. The Mathematical Association, the Association for the Teaching of Mathematics, the University Departments of Education Maths Study Group, the maths teaching section of the lecturers' union NATFHE and the National Association of Maths Advisers are due to meet this weekend to draw up a joint protest about the 16 plus proposals.

One bone of contention is the common core of maths for all pupils suggested by the boards. This is much larger than the "foundation list" suggested by Cockcroft. Maths syllabuses are widely held to be overloaded for pupils of moderate abilities.

Mr Billington, who is vice principal of High Pavement sixth form college, Nottingham, said the Cockcroft list was for the bottom 40 per cent of the ability range, whereas the 16 plus exam is meant to be for the other 60 per cent.

Professor William Wynne-Wilson of the University of Birmingham, is the Mathematical Association's spokesman on the Cockcroft Report. He said Cockcroft also maintained that little more than the foundation list should be expected of those getting the lower CSE grades and that a common core should be suitable for all the pupils taking the exam.

The boards' proposals have also been criticized for including mathematics for which there is no obvious practical application and for drawing up what amounts to a syllabus rather than the general guidelines they were asked for.

The other major mathematics group is the Institute of Mathematics and its Applications, the body that represents professional mathematicians. Their disclosures about the poor numerical skill of 15-year-olds contributed to the climate of opinion that led to the Cockcroft enquiry in 1978.

The IMA is expected to produce comments on the 16-plus proposals and the Cockcroft report later in the year through the joint IMA/Royal Society maths education committee. That committee has yet to consider either of these reports but Mr Don Harlow, the Royal Society's education officer, made it clear this week he did not

regard the 16-plus proposals as "line" with Cockcroft.

"Cockcroft suggests building the bottom upwards whereas our practice starts by looking at the end and watering down for the able," he said.

Mr Billington, who is the boards' nominee on the working party, said the working party was reconsidering its proposals in light of the comments received in one respect at least, the result in an increase in the size of the common core rather than a reduction. The Cockcroft foundation included trigonometry which the working party left out the first round after some debate.

The working party will not the final say over the shape of exams, however, in maths or other subjects. The joint cockcroft and CSE boards have approved the criteria proposed by these groups and before it does it is going to consider the views of Schools Council, which is expected to back Cockcroft, the Department of Education and Science and the final proposals to be put to the Secretary of State at the end of the year will be the result of considerable negotiation.

Closure makes Helen go bald



BEFORE: Helen with



AFTER: Helen without

Banners and demonstrations have lost their impact, Helen Halc believes, so she has chosen a more dramatic form of protest.

Helen, 20, has shaved her head over a decision to close her college, the Weymouth branch of the Dorset Institute of Higher Education, where she is a student of English and media studies. The 500 students are to transfer to the Bournemouth branch.

"Banners and marches just don't do any good," Helen said. "I thought shaving my head would attract a lot more attention. I thought my tutors would be very shocked, but they support me completely."

Extra year for Salford

Salford University, the higher education institution worst affected by the cuts, has been granted an extra year to run down its courses and student numbers.

It is the only university to have won an extension of the three-year cuts period from the University Grants Committee. The committee sent out letters to vice-chancellors last week which confirmed in almost every case the advice it gave last July.

Salford had asked for an extra two years to implement its 44 per cent cut. The UGC rejected that request but said it was minded to agree to an extension to four years, with grants for 1982-84 increased accordingly.

Another exception to the general rule was Bradford, which will be allowed to increase its engineering numbers by 50, with a higher grant to match.

Mass protest fails to sway council

County agrees to axe 445 teachers' jobs

by Richard Garner

County councillors in Hereford and Worcester have approved plans to axe 445 of the county's 6,200 teachers' jobs by the summer as part of a £44m cut in the education budget - despite a protest demonstration outside county hall by more than 4,000 teachers, parents and trade unionists.

Teachers' leaders fear the plans will mean voluntary or compulsory redundancies for their members, and were meeting county council officials to discuss their implications as the TES went to press. The decision will also mean cutting out the school meals service for primary children and making 1,100 kitchen staff redundant. In addition 19 administration jobs will go, four inspectors' jobs will disappear and 60 college lecturers' posts will go.

Defending the reductions during a nine-hour debate on the budget, Lieutenant-Commander Nigel Luvillo, chairman of the education committee, said that an excellent service would still be provided.

Mr Bert Meakin, National Union of Teachers executive member for the area, said: "Teachers will not now be able to meet the curricular needs of their children. What we are

now seeing over a period of five years is a reduction in the teaching force of well over 900. It is clear that the curricular content will suffer because you are not going to have enough teachers in the county to maintain a viable curriculum."

"Existing national schemes for retirement will not be able to replace the full number that will be required to go. There are 3,000 teachers over the age of 50 who county council is obviously going to have to make other means. This will mean one of two things: voluntary redundancy of teachers under the age of 50 or declaring certain people redundant."

Mr Fred Smithies, deputy secretary of the National Association of Schoolmasters/Union of Teachers, said: "We hope our members will be persuaded, but it has come when it is the height of folly and irresponsibility to countenance a policy of papering over the cracks."

"We have got to stop that because if we continue to do so we will be discharging the harmful impact of the teaching policies of the county council. It will only encourage them to go further down that road."

Meanwhile, on a musical note

Trust fund may be set up to save individual tuition

A trust fund may be set up under the auspices of Hereford and Worcester county council to pay for individual music tuition in the county. The idea emerged from a county council meeting which gave the go-ahead to the cut in the authority's budget for next year.

Discussions on the plan were taking place this week with a view to a decision on whether to set up the trust fund being taken by the school's sub-committee at its meeting next Tuesday.

If it is agreed, the scheme would work like this: parents would be encouraged to covenant money to the fund for between three and seven years to help pay for their children's lessons, and local industrialists and the county council would earmark funds for the trust - on which would sit councillors, music teachers and representatives from industry.

The idea is that the fund would subsidize lessons for children who parents were unable to pay for. Money could also be borrowed to school orchestras to allow them to continue.

The move is the latest in the running saga of the fate of the county's music tuition. Last year a county judge ruled that fees charged for tuition were illegal.

Originally the county council had decided this year to scrap music tuition, but decided to keep it following an outcry from parents. All the money would come from the fund by parents.

Mr Fred Smithies, deputy secretary of the National Association of Schoolmasters/Union of Teachers, condemned the suggestion as "hollow", and doubted whether the county council would have enough funds for the scheme.

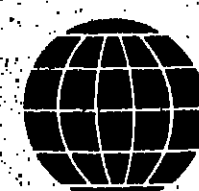
100% BRITISH and proud of it!

It might have been fashionable at one time to be an 'international' company, shipping out sterling and bringing in cheap merchandise from Taiwan and Korea.

So forgive Hestair Hope for being - in one respect - decidedly unfashionable. We're 100% British and proud of it. British owned. British financed. With British affiliates, which include Dennis Motors and Kiddicraft Toys.

Thumb through the 1982 Hestair Hope educational supplies catalogue and you'd be forgiven too for noticing that it has a strong British influence, with more than 90% of the products shown made in this country.

You may call it patriotism. But we think of it as investing in the best quality that money can buy. And one order from the new Hestair Hope catalogue will prove it!



Hestair Hope

St. Phillips Drive
Royton Oldham. Telephone: 061-652 1411.



The Hestair Hope Catalogue

Fly the flag! Send for Britain's most up-to-date educational products catalogue, by Hestair Hope. Contains more than 7,000 items with over 1,000 colour illustrations. Available FREE on request. From Hestair Hope Ltd., FREEPOST, St. Phillips Drive, Royton, Oldham OL2 6BR.

Please send the 416-page Hestair Hope catalogue for 1982 ☐ Special Education ☐ Primary Education

☐ Pre-School ☐ Laboratory Consumables Price List ☐ Further Education ☐ Middle & Secondary Education PLEASE TICK

Name

Address

Post Today ☐ NO STAMP NEEDED IN THE U.K.

Courses

UNIVERSITY COLLEGE OF SWANSEA
Faculty of Education

Eleventh Summer School in Pastoral Care and Guidance: Effective Pastoral Care

SATURDAY, 24th JULY TO SATURDAY, 31st JULY, 1982
Course Director: Douglas Hamblin

This summer school will focus on the conditions and skills necessary for effective pastoral care. Workshops led by experienced practitioners in which participants develop materials for use in tutor periods in their schools form an important part of the course. The management and innovative skills of the head of year or house, especially those related to leading a team of tutors, will be examined. Methods of evaluation and monitoring the pastoral system will be explored. The integration of the pastoral and curricular will be stressed, showing how pastoral activities help the school attain its educational objectives, and contribute to the professional status of the teacher.

Details available from:

The Secretary
Faculty of Education
University College of Swansea
Hendrefollen
Swansea SA2 7NB



IN-SERVICE TRAINING COURSES

Easter

Constructing the secondary school curriculum
David Warwick, Malcolm Skilbeck
Management: Decision making & leadership. Mervyn Saunders
Pastoral care in action. Keith Blackburn, Michael Marland, John Bazzigale.
The mechanics of timetabling. John Stibbs

Summer

Education 16-19: The changing pattern. Eric Macfarlane
Management: relationships & staff development. Mervyn Saunders
Middle management in the secondary school. David Warwick
Skills for active tutorial work. Jill Baldwin
The mechanics of timetabling. John Stibbs

Further information from The Secretary, ISTC,
83 Ashurst Road, Barnet, Herts.
Tel: 01-449 5342

1982



EDUCATIONAL DEVELOPMENT ASSOCIATION SOUTHERN SUMMER SCHOOL PORTSMOUTH MANAGEMENT CENTRE

JULY 24-30
Advanced Primary
Management
Leadership and Responsibility
In the Primary School
Children with Learning
Difficulties
Primary Language Policy
Primary School Mathematics
Curriculum & Organisation 3-8
years
Folk Dancing

31st July-6th August
Specific Reading Difficulties
Computing in the Primary
School
Simple Science 5-13
Leadership & Responsibility in
the Primary School
Music with Mary Berry
Southern Heritage III - activity
holiday

Brochure from: Jean Fisher, 58 Mill Rd, Whitteley, Peterborough, Cambs.
Telephone 0733 203130
Excellent Accommodation and Social Programme

UNIVERSITY OF LONDON GOLDSMITHS' COLLEGE IMPROVISED MUSIC - AN EDUCATIONAL RESOURCE

A 2-day seminar on the educational value of improvised music with 3
contrasted historical examples, 28/27 MARCH, 1982.

Details:
RASS, GOLDSMITHS' COLLEGE, LONDON SE14 8NW.

City of Coventry THE HILL COLLEGE OF FURTHER EDUCATION Principal: Dr H. E. Avery

Caring Relationships in Organisational Settings

A short course in group and
organisational processes,
interpersonal skills and basic
counselling (P.E.S. Regional
Course No. 107)
Venue: Coventry (Lancashire)
Polytechnic
Dates: Monday, 5th July -
Friday, 9th July, 1982
Details: Pam Lunn, The Hill
College of Further Education,
The Hill Lane, Coventry, CV4 9SU

GCE SUCCESS

Your first step to success begins
when you pass your G.C.E.
Getting a job with good prospects, going
on to university or training for a
career, all depend on your G.C.E. results.
The Rapid Results College was
founded over 50 years ago. We've helped
many thousands of students through their
G.C.E. with clear, simple tuition from personal tutors
who guide you step-by-step to passing in the
shortest possible time. And tested by our
2-year guarantee of free, continued
tuition for the unlucky few who fail first time.
Write immediately for FREE 32 page GCE
Prospectus or FREE 100 page Specialist
Courses Prospectus to:
The Rapid Results College, 100, The Quadrant,
Barnet, Herts. EN4 3JF. Tel: 01-449 5342

Second union may join NUT strike over cuts in Barking

by Richard Garner

Leaders of the National Association of Schoolmasters/Union of Women Teachers will today consider a call from their members in the Labour-controlled London borough of Barking and Dagenham to join NUT members in strike action against the cuts.

In a letter to his union's national action committee, Mr Bill Bonnen, branch secretary, says that his union's 250 members should be "entering the strike arena" with the 900 or so NUT members who are on indefinite strike.

He said this week: "I consider our own national executive are pussyfooting about on the perimeter of effective industrial action. We have got to

get off the fence and acknowledge the commitment we made at our annual conference in 1979 that where job security is clearly threatened we would take strike action.

"I accuse my own national executive of back-peddalling on that clear-cut commitment. I am spearheading 250 very demoralised members of the NAS/UWT here. We don't like playing second fiddle to another union."

Mr Nigel de Gruchy, Assistant Secretary of the NAS/UWT, said: "We are not enamoured of strikes and we have to rule with our heads rather than our hearts and stick to well-tried tactics of refusing to cover

for absent colleagues.

"However, we do understand members wanting to react when union starts things and I am sure circumstances will be carefully by the action committee."

NUT members began their strike action last week in protest to axe 149 teaching posts.

Mr A. W. Bush, the council education officer, said 7,777 school children (55 per cent) excluded from school as a result of the strike and that all secondary children were missing some lessons between councillors and NUT is planned next week.



NUT leader Ken Jones coordinates strike tactics

Richard Garner joins the pickets who vow to get up earlier

Too late to stop the food going

Shortly before 7 a.m. on Monday six, beary-eyed teachers took up positions outside the gates of their schools - and the all-out strike by Barking and Dagenham teachers had entered a new phase.

The six, all teachers at Parloes Manor comprehensive school, were too late to stop the first delivery of food to the school, which had been sent in at 6.15 a.m. However, they vowed to return earlier the next day to make sure of stopping it in an effort to hasten the closure of the school.

About 900 members of the National Union of Teachers are on indefinite strike in protest against education cuts which will mean the loss of 149 teaching posts over the next year.

All potential pickets are being issued with guidelines by the local association about what they should do while on picket duty. These stress that they should not allow anyone who is not a member of the union to join their picket line, and add that each picket should concentrate on picketing his or her own school.

Ms Ann Pocock, president of the Barking and Dagenham Association of the NUT, said: "We are not trying to stop children, kitchen staff or other teachers - people who would join the picket line. It's the poor ones and other deliveries - fuel, maintenance and that sort of thing - that we aim to stop."

The pickets at Parloes were soon turning away milk and bread deliveries, and a postman, on seeing them, refused to deliver mail to the school.

"No pressure was needed at all," said Ms Jenny Wilkins, one of the six. Ms Nicky Prince, another, added: "Parents have been quite prepared to talk to us. They have been very supportive. In fact I haven't met anybody who has been antagonistic. The worst has been some people who have said they don't want to sign our petition."

Ms Wilkins added: "Some people have been asking us why we're not all out together. They are in unions like the Transport and General Workers' Union or the General and Municipal Workers' Union, and they say 'if there's something like that, we're all out together'."

"However, several members of the National Association of Schoolmasters/Union of Women Teachers have said that they are going to write to their own union and ask that they come out on strike, too."

Mr Bill Bonnen, local secretary of the NAS/UWT, said: "On the question of job security we are 100 per cent with the NUT. The cuts are clear. We feel that in view of the NUT approach to them we should be in the strike arena too."

In fact, his job as head of the Heathway Industrial Education Centre, which gives about 100 children a year industrially-related education, is to disappear under the cuts. The centre is aimed at helping non-academic children in their final year.

Mr A. W. Bush, the chief education officer, said: "All of the secondary schools are affected to a greater or lesser extent. It seems that those schools all of the NUT taking strike action."

"Large numbers of pupils have been excluded from school. Knowledge only about half of the schools are not affected at all. On the primary side, large numbers of teachers are on strike."

He added that children's petitions for CSE examinations being affected. "I gather we have not been willing to set with the examinations as it is an all-out strike. There are some examinations in progress at the moment. Teachers have agreed to vigilante them."

Teachers counter criticism of failure to get work for example by saying that the long-term pupils' exam chances because cuts would be far greater.

NUT members at each school holding parents' meetings before the strike to them. The letters were sent to children's parents and so far about 11,000 parents signed a petition protesting cuts.

"I think some people think that we'd all stay at home semi-detached," said Mr Bonnen, one of the picketing "but that's just not happening. We want to work in the children's education."

The fall in take-up in the public funds.

The fall in take-up in the public funds. The fall in take-up in the public funds. The fall in take-up in the public funds.

Police continue with 'shocking' safety film

by Sandra Hempel

Kent police are to continue showing an American road safety film in local schools although one pupil fainted during a viewing and 12 others walked out complaining of sickness.

The 25-minute film, called *Options to Live*, is part of the Kent Road Safety Unit's standard secondary schools programme. It was shown to fifth and sixth form girls at Dover Grammar School last week but had to be stopped after the first three minutes.

It relies on shock tactics by discussing the various choices which drivers have, including whether to wear a seat belt, drink and drive and overtake dangerously, and then showing in detail the accidents which can result from a wrong decision. It includes dead bodies.

"The film is meant to shock," said Sergeant Malcolm Rouse of the Kent Police Road Safety Unit. "We also show some slides which are not exactly pleasant. We have found that the soft approach to road safety just does not work."

"We always warn the staff before showing the film and slides and if the school does not want them then they are not used. One or two pupils have said that they felt a bit sick after

seeing it but in this case I think there might have been some mass hysteria involved."

Kent police bought the film 18 months ago and since then Sergeant Rouse says it has been shown to a large number of the 68,000 secondary school children in Kent. Of 168 people killed in road accidents in the county last year, 40 were under 19.

"Young people are more and more mobile these days. Quite a few of the girls at Dover school hold provisional or full driving licences. It is no use talking about the Green Cross Code. Road deaths are shocking and we have to get this point across."

Miss Joan Hasler, the school's head, said that some of the sixth-formers had seen the film before. "I think some of them expected to feel ill and then did. I would show it again but obviously because of what happened I would speak to the pupils beforehand and anyone who wanted to leave could do so."

A follow-up questionnaire of the 225 pupils showed that the majority thought it was valuable while 40 of the group thought it should not be shown. "The most telling answer was that 183 said they would be more careful on the roads in future."

EOC rejects call on sex bias cuts

The Equal Opportunities Commission has turned down a request to investigate possible sex discrimination in the way university cuts are being applied.

It says, however, that the cuts will have a disproportionate effect on women students although the law is not being broken.

The Association of University Teachers asked for the investigation because the reduction in arts, humanities and social science affects women more than men. The EOC agrees but believes that the solution lies in persuading more women to opt for science and technology courses. In the short-term, however, it is asking the

Department of Education and Science to spread the cuts over five years.

What is needed is a positive policy in schools to ensure that girls are encouraged to take science and technology and do not automatically follow arts courses, the EOC says.

A leaflet by the commission tells parents how subject options can affect the futures of fourth and fifth year pupils. Called "Getting It Right Matters", it includes a checklist of important questions to ask when subject choices are being made and which careers need a qualification in science.

Stamps tribute to youth groups

British youth organizations which have grown into world-wide movements are commemorated on a set of four stamps to be issued by the Post Office on March 24. They are: the Boys' Brigade, Girls' Brigade, Scout movement and Guides and Brownies. The stamps were designed by Brian Sanders of Highgate, London.

School nurse status sought

by Virginia Makins

Confusing anomalies in the school nursing service, and the training and status of school nurses, should be sorted out, says a report from the Society of Area Nurses, Child Health.

The society recommends that each school should have a named nurse. School nurses should normally have health visitor training, or be state registered nurses who have done the health visitors' approved school nurse training.

A case study featuring a school-age child should have an examination requirement for health visitors, and field work tutors should be required to give as much weight to school nursing as to other aspects of health visiting.

The Future of the School Nursing Service. Society of Area Nurses, Child Health. Copies of the document available from Mrs M. Morrell, chairman, Society of Area Nurses, Child Health, Hertfordshire area health authority.)

More say

Children and young people concerned with special education should be involved in decisions made about it, the Children's Legal Centre said this week.

Commenting on the draft circular and regulations relating to the 1981 Education Act on special education, the centre maintains that all case conferences should be open to those directly concerned, including the young people.

The centre also proposes that, to put pressure on local authorities to integrate children with special needs in ordinary schools, the government should force education authorities to give reasons when, under the Act, they decide that a special needs child should not be in an ordinary school.

Who pays when your language lab breaks down?



The simple answer of course is that both student and Education Authority pay for it. In teaching hours lost and in pure financial terms.

But with a Sony Language Lab they'll both pay a lot less.

Why? Because Sony quite apart from being supremely reliable, are the only manufacturer of language labs to give you a 2 year guarantee.

Secondly, we're the only manufacturer to provide a comprehensive network of dealers to install your equipment when you buy and service it whenever necessary. So in the

unlikely event of a machine of ours requiring attention it won't take us long to get to you. Even if the problem can't be dealt with on the spot, we'll supply you with a replacement whilst repairs are carried out.

And nobody but Sony offers a complete range of language labs to suit varying needs, from economic portable systems to more sophisticated fixed systems.

We even make high speed audio-cassette

duplication for speedy distribution of lessons, and systems which can be expanded to increase your existing language facilities as your needs grow. So if, for example, you only require a language lab for 10 students now,

the same system can be built upon to handle as many as 70 students, without the need to replace your original machinery.

So if you are thinking of replacing your language lab or, indeed, buying one for the

first time, fill in the coupon and we'll be happy to send you a brochure and arrange for your local dealer to demonstrate the system which suits you best.

It'll certainly save you and your students learning the hard way. **SONY**

To: Keith Smith, Sony Education Systems, Pyralis House, Sunbury Cross, Sunbury on Thames, Middlesex.

Name _____

Address _____

Position _____

YES

Whither the cane? TES reporters look at the implications of the European Court judgment on corporal punishment in schools

What Strasbourg ruling means The rights and wrongs of six of the best

by Biddy Passmore

The European Court of Human Rights did not say last week that corporal punishment should be abolished. But what it did say may turn out to have the effect of banishing the cane and the belt from state schools throughout Britain.

Ministers and officials are still chewing over the implications of the court's ruling that parents have the right to reject corporal punishment for their children. At first sight, it simply appears to give parents the same rights over corporal punishment as they can already exercise under the 1944 Act, over religious education. In England and Wales, an amendment to the 1944 Act is therefore a possibility.

The problem is not as easily solved as that, however. The result of such parental freedom could be chaos in schools, as the teacher unions have not been slow to point out. Would parents have to voice their objections to the cane or belt before their child started at the school? If not, would a letter or telephone call when the child was actually threatened with corporal punishment do? Could little Johnny even stop the cane in mid-air by suddenly revealing that his mother didn't approve? In any case,

how could two children be punished unequally for the same offence? These difficulties explain the jubilation of the anti-caning lobby over last Thursday's judgment. The Court's verdict would deal "a death blow" to corporal punishment, Mr Tom Scott, education secretary of the Society of Teachers Opposed to Physical Punishment (STOPP), said. The situation would become crazier and crazier unless the Government banned it completely.

The Government may be forced to do that in any case if the Court now decrees that corporal punishment is "inhuman or degrading treatment or punishment" and thus a breach of article 3 of the Human Rights Convention. It did not do so last week, mainly because neither of the Scottish schoolboys in question had actually been belted. But there is now a series of cases lodged with the European Commission of Human Rights which should decide the matter.

The first of these is likely to be that of a boy from Derbyshire who was given two strokes of the cane, allegedly for throwing a conker out of a bus which hit a school crossing patrol. Another concerns Edward

Brant, a boy of 13 from Hereford and Worcester, who was removed from school by his mother after he had been caned. His parents were fined £25 by the local authority for failing to secure his attendance at school. There is at least one more such case from England, and three more from Scotland.

A preview of the likely outcome of these cases was also given last week, with the news that a girl of 14 who had been caned by her headmistress had been awarded £1,200 damages by the Commission of Human Rights - the lower tier of the Council of Europe's human rights machinery. It is understood that, at a preliminary hearing of the case, the commission decided by 13 votes to 1 that the caning was a breach of article 3.

The award for damages, combined with over £1,000 in costs for the girl's mother, were one half of the settlement agreed last year between the mother and the British Government. The other half was an undertaking by Britain to send out a circular to local authorities warning them that the use of corporal punishment may in certain circumstances be contrary to article 3.

The rights and wrongs of six of the best

by David Martin

Although Article 3 of the European Convention on Human Rights states: "No one shall be subject to torture or to inhuman or degrading treatment or punishment", English law recognizes the right, delegated by the parent, of a teacher to inflict moderate and reasonable corporal punishment on pupils under the age of 18, with an order to bend over followed by six of the best being the traditional way of dealing with more serious breaches of school discipline.

This punishment, which involves the infliction of physical pain, may be used on both boys and girls, and when administered illegally constitutes both a crime and a civil wrong. It must not be inflicted for the gratification of rage or passion. The punishment must be moderate in its nature and degree, not being excessive or protracted beyond the child's powers of endurance, and applied with a suitable instrument, such as a cane or slipper, so as not to cause serious permanent or temporary bodily harm.

The law does not specify parts of the body on which the punishment may be inflicted, but where applied to the hand care should be taken to ensure that no internal physical injury is caused, and under no circumstances should a child be hit about the head or in the face.

Where the punishment has been inflicted reasonably and moderately, bearing in mind the child's age, with no injury other than transient pain or

slight bruising to the buttocks caused, the courts have held it to be lawful.

However, the Education Act serves the common law principle that "so far as is compatible with the provision of efficient instruction and training", pupils are to be educated in accordance with their parents' wishes.

The teacher's power to use corporal punishment is delegated to him by the parent. By sending his child to a particular school, the parent has, in effect, delegated to the teacher all parental rights, duties and powers in respect of the child during the times when it is in his care.

When a child becomes a registered pupil at a school, within the system, it is subject to the discipline and control of the head and of teachers who have implied authority to impose corporal punishment should the child misbehave. While growth of opposition to this type of punishment in schools over the past decade or so, the legal view has been taken that a parent has the right to refuse to allow his child to be punished in this way by his registered teacher's power.

However, where parents, after refusing to allow their children to be caned or slipped, have deliberately kept them away from school until assurance has been given that no corporal punishment will be used, or if a head has refused to allow a registered pupil to enter the school premises until consent has been given for the use of this type of punishment, the courts have convicted them of failing to ensure that the child attends school.

But protocol 1, article 2 of the Convention on Human Rights provides that a person shall not be denied the right to education, and the state, in exercising functions which assume in relation to education and teaching, shall respect the right of parents to ensure such education and training in conformity with their religious and philosophical convictions.

Thus the question before the European Court of Human Rights in the case involving Scottish schools was whether a parent has the right to restrict the scope of the authority which he delegates to the teacher and prevent the use of corporal punishment on his child.

Having considered the issue, the court, although not defining the meaning of "philosophical convictions", ruled that the parents' views on the use of this method of enforcing school discipline were sufficient to bring them within the provision of the Convention as they related to a weighty and substantial aspect of life and behaviour involving the integrity of the person, the propriety of education, and the exclusion of the use of corporal punishment which the risk of such punishment entails.

On reaching this conclusion the court went on to hold that by failing to ensure that the child was educated in a school where he was not subject to the risk of this type of punishment, the school had violated the Convention by failing to ensure that the child was educated in a school where he was not subject to the risk of this type of punishment.

David Martin is a barrister, specialising in the law relating to children and a lecturer on educational law.

Whither the cane? Why two mothers fought against 'inhuman punishment'

Background to the tawse judgment

In 1976, two Scottish mothers lodged complaints with the European Commission of Human Rights about the use of the Scottish tawse (a kind of strap) in their children's schools. The first, Mrs Grace Campbell, had been refused a guarantee from the File Education Authority that her son Gordon, then aged 10, would not be tawsed while he was at his primary school.

In the second case, Jeffrey Cosans, then aged 15, had been threatened with the tawse after taking a forbidden

route home from school, had refused to accept the punishment, and been suspended as a result. His mother, Mrs Jane Cosans, had failed to get a guarantee from the Strathclyde region that he would never be tawsed if he returned to the school. (He never, in fact, returned because he reached the end of compulsory school age in May the following year.)

The mothers alleged that the existence of the tawse in Scottish schools violated article 3 of the Human Rights Convention, which forbids "inhuman or degrading treatment or punishment" in the states that have signed.

They also said its existence showed that Britain was not respecting their "philosophical convictions" and, in Mrs Cosans' case, that her son's suspension from school constituted a denial of his right to education (both breaches of article 2).

Last Thursday, the Court of Human Rights decided that article 2 had been violated but said there had been no breach of article 3. Below are extracts from what the judges said.

European Convention on Human Rights - key provisions

Protocol 1 article 2: "No person shall be denied the right to education. In the exercise of any functions which it assumes in relation to education and to teaching, the state shall respect the right of parents to ensure such education and teaching is in conformity with their own religious and philosophical convictions." Article 3: "No one shall be subjected to torture or to inhuman or degrading treatment or punishment".

Protocol 1 article 2: "No person shall be denied the right to education. In the exercise of any functions which it assumes in relation to education and to teaching, the state shall respect the right of parents to ensure such education and teaching is in conformity with their own religious and philosophical convictions." Article 3: "No one shall be subjected to torture or to inhuman or degrading treatment or punishment".

● that separate schools should be provided within the State educational system for children of parents who object to corporal punishment;

● that separate classes within the same school should be provided for such children;

● that a system should be established in which children in the same class should be treated differently according to the views and wishes of their parents.

The Court accepts that the first solution would be incompatible with the avoidance of unreasonable public expenditure, especially in the present economic situation. The second solution too would involve unreasonable expense and hardly be compatible with the provision of efficient instruction and training. Moreover, in this connection the wide implications of the Court's interpretation above must be borne in mind. There remains the third possible solution referred to above. The Court was informed at the oral hearing that at least some members of the Commission held the view that this would, for many reasons, not be a practical solution. I agree with this view.

"It seems to me essential that any system of discipline in a school should be seen to be fair and capable of being fairly administered, otherwise a sense of injustice will be generated with harmful consequences both for the upbringing of the individual and for harmonious relations within the group. It will also place the teacher in an impractical position to administer discipline fairly if children in the same class have to be treated differently according to the views of their parents. It has been pointed out that, where corporal punishment is used, exceptions are in any event made in respect of girls and children suffering from a disability. I believe that children will readily understand the reasons for this, but I think they are likely to regard it as arbitrary and unjust if Johnny is exempted simply because his Mum or Dad says so."

Reaction to judgment: study in contradiction

Just some of the contradictory reactions aroused by last Thursday's judgment:

"My advice to members is carry on caning. The judgment does not alter the situation in England and Wales at all." (Mr David Hart, National Association of Head Teachers).

"As soon as parents see the practical consequences - that their son gets beaten while so-and-so doesn't for doing exactly the same thing - they will say it's very unfair. The more you think about it, the crazier the situation that's going to develop unless the Government bans corporal punishment completely." (Mr Tom Scott, Society of Teachers Opposed to Physical Punishment).

"A head can continue to use corporal punishment as one of the school's sanctions until such time as the law changes or a directive from DES or I.e.a. is handed down. We must accept that there is a changing climate of opinion about this important matter which we should be most unwise to ignore. Where corporal punishment is concerned there appears to be a rethinking about our 'in loco parentis' position. We need to

face the implications of this and to consult together and plan ahead for the sort of sanctions which might sensibly replace corporal punishment." (Mr Donald Frith, Secondary Heads Association).

"Parents have clearly been given significant extra powers and with that must go commensurate additional responsibilities. Any parents of an unruly child who refuses permission for teachers to exercise their discretion must guarantee the good behaviour of the child. If they don't deliver on the guarantee, the answer is to send the child back to the parents." (Mr Nigel de Gruchy, National Association of Schoolmasters/Union of Women Teachers).

"The effectiveness of corporal punishment does not really arise from inflicting pain, however, except as an avoidable and temporary side-effect. Many teachers favour its retention because it is a symbolic, self-contained but serious sanction, seen by many children as fair because, unlike suspension, exclusion or expulsion, it does not go beyond the unacceptable behaviour to which it relates. If corporal punishment ends, what similar sort of disciplinary sanction is there to replace it?" (Miss Barbara Hall, Assistant Masters and Mistresses Association).



Mrs Campbell one of the mothers who brought the successful action

In Ilford they send for mum and dad Parents rule as cane goes back in cupboard

Instead of fetching the cane from the cupboard, fetch the parents from home. This is the growing practice as more and more schools phase out corporal punishment, either because they decide to or because a local council decides for them.

Mr Saul Barra, 55-year-old head of Little Ilford, a 1900-pupil comprehensive in London's East End whose ruling authority, Newham, abolished corporal punishment last September, was in the van of the "out with the cane" movement. This was back in the early 70s as a housemaster at Hamp-

stead school, north London, when with no pressure at all from the education authority, parents and staff agreed to abandon that form of punishment.

"We set up a sanctuary staffed by senior teachers in turn. Pupils were only withdrawn for that particular period - after all, they may behave for the next teacher but at the end of the day a printed letter was on its way to the parents telling them what had happened."

"There must be a total partnership with the parents. They must be brought increasingly into the school."

For all that early experience there is no sanctuary yet at Little Ilford. Before coming to the school only 16 months ago, Mr Barra was deputy of another school, Trinity, a few miles away. "We could see abolition was coming so we set up a working party to see what else we could do. We agreed parental involvement was one of the best answers."

"The policy at Little Ilford is to exclude rather than dump in a special unit. 'Sometimes we don't even do that, I say, 'I want to see your parents tomorrow morning. I'll get on the phone to them myself.' They take notice."

But even that is late along the road. In the early 70s, when corporal punishment was still the norm, Mr Barra's own words were: "First, come referrals. In the first stage it may be the form tutor who can exploit a personal relationship built up with a pupil that an occasional teacher, with whom friction has occurred, does not have. If that does not succeed then beyond is the year head, housemaster, deputy head. The length of the chain is its strength."

Traditional punishments are sometimes applied in the school. There are detentions, though lines and essays are "done" in the English staff room. For graffiti artists the caretaker is brought in and the cleaning materials handed out. Bad behaviour in an away fixture can result in a player being banned from the side for some time "even if he is on his way to being the best footballer in England."

Sometimes a culprit may be put on report which requires an entry about his conduct entered and signed by the teacher after every lesson and inspected by the head at the end of each day.

"I say to them, 'Prove to me there is a good side to you.' It's the beginning of the positive approach. For traditional sanctions are negative. What are you appealing to when you cane a pupil? And look how often the same names keep reappearing in the punishment book. Particularly in the lower school, moral pressure is much more effective."

"Don't be preoccupied with sanctions. Go for merit. Anything meritorious about a pupil is recorded in the daily school bulletin. At the end of the year we award certificates for effort."

All this to some assistant staff may look like theorising from within the safe isolation of the headmaster's office. The challenges at the chalk-face may provoke a different response. Surely there is the odd member of staff known (and feared?) for the unrecognized physical approach. The twined ear, the sharp tug on the short neck hair, the six-inch jab under the ribs?

Mr Barra says: "I can't put my hand on my heart and say this never goes on in a school this size. But I hear of anything like it I tell that teacher straight. 'If this should come to anything I can't support you.'"

Bert Lodge

while in the Irish Republic it's a case of Adjusting to the ban

Teachers are adjusting reasonably well to the abrupt abolition of corporal punishment in Irish schools.

Although they knew it was on the cards for some time, they were only given five days' notification of the official outlawing of physical punishment from the first of last month. Many of them were critical of the fact that no alternatives were agreed beforehand.

In the official circular to schools, the Department of Education said also that "it is the duty of the teacher to undertake a pupil's self-control and discipline should not be used in any circumstances. It is warned that any teacher who contravened the new rules would be guilty of conduct in breach of the disciplinary code."

The circular did not say what schools should do about the ban. It merely said that teachers should "adjust to the ban" and "adjust to the ban". It also said that teachers should "adjust to the ban" and "adjust to the ban".

John Walsh

PICK OUR BRAINS



The Sharp PC3201. The computer created for business and industry, incorporating a screen for crisp, clear information, a twin disc-drive printer to enable you to keep everything in black and white, and a C.R.U.

The Sharp MZ80B. The computer that offers the educationalist and the scientist many of the features previously associated only with larger, more expensive products. Here is the versatility you need to handle a huge range of software and hardware applications.

The Sharp MZ80K. The computer designed for improving efficiency in small businesses, widening the learning spectrum in educational establishments, and adding to the pleasure for the home enthusiast.

Please send me further information on the:

MZ80K ☐ PC3201 ☐ MZ80B ☐

Name _____

Address _____

SHARP
First, and foremost.

Sharp Electronics (UK) Ltd., Sharp House, Thorp Road, Newton Heath, Manchester M10 9RE. Telephone: 061-205 2333.

Juniors: UCET urges two year course for graduates

by Bert Lodge

Graduates intending to teach juniors should have a two-year course of training, according to the University Council for the Education of Teachers in a report on primary and middle school teacher training.

But until this is achieved the current one-year postgraduate certificate in education course should be at least 33 weeks long for intending graduate primary teachers. And this could be combined with the first year in the job to make a two-year preparation for teaching young children.

Graduates specializing in this age group should be trained in teaching language, number, physical education and two other broad areas of the curriculum.

The necessity of a two-year course

cannot be overstressed, says the council. It adds: "Short of that the priority must be to ensure that a one-year course is itself as long as is reasonably practicable. Thirty-three weeks preceded by some preliminary experience and broken only by normal vacations used for private study and preparation of assignments, is an absolute minimum."

The council does not favour trying to extend the course by such devices as starting it soon after graduation or extending it into the final summer vacation. These proposals "would probably prove impracticable for most institutions and would certainly be generally unpopular."

Until the two-year pattern is established the induction year could be extended to two, UCET suggests.

"At the least it is necessary for education authorities to allow all beginning teachers one day per week in which to meet others in mutual support."

Out of about 10,000 graduates annually following a PGCE course only 800 specialize in nursery, infant or junior teaching and a further 600 in middle school work.

But the DES recently suggested that to meet the steep rise in demand for primary teachers which will begin in the late 80s PGCE departments should adapt themselves to turning out primary-trained graduates.

The report was prepared by a working party chaired by Professor W. A. Blyth, Liverpool University school of education.

Jobs go-ahead for suspended teachers

A Welsh nationalist, who was suspended from his school job after serving six months in jail for continuing teaching, the Department of Education and Science has ruled.

But Mr Wayne Williams is unlikely to be reinstated immediately at Llanidloes High School, Powys, because of a High Court injunction still outstanding against him.

He can, however, apply for jobs elsewhere.

Mr Williams, 28, a former chairman of the Welsh Language Society, was jailed last year for conspiring to damage west country television trans-

mitters during the militant campaign for a Welsh-speaking TV channel.

He has been suspended without pay since the beginning of the term after 200 parents obtained a temporary injunction preventing his return to the school.

In a letter Mr Williams was told that his behaviour had caused Sir Keith Joseph, Education Secretary, the "gravest concern" and further misconduct would be likely to lead to his "exclusion".

The investigating officials are believed to have made their recom-

mendations for a number of reasons:

● He did not bring his political views into the classroom. He had effectively taken responsibility for the offence because of his chairmanship of the society.

● He had promised not to take part in any activities which could lead to further offences of this kind.

Mr Williams said: "I am obviously delighted with the decision but disappointed that I am still unable to teach at the school. I have received no date as yet for the hearing."

Fears after 'cowboy' move

By Richard Garner

Fears that other local education authorities will follow Bromley's lead in declaring teachers redundant are voiced by a teachers' leader in this union's magazine.

Mr Alan Poole, president of the National Association of Schoolmasters/Union of Women Teachers, writing in *The Schoolmaster and Career Teacher*, says: "Teaching will become even less attractive to bright youngsters if they see the high-handed and cowboy fashion in which authorities dispose of those in present employment."

"He says that Bromley may well go down in history for its 'lack of educational perception', but adds: 'Unfortunately, other authorities may follow their lead.'"

Mr Poole goes on to argue that the time has now come for Sir Keith Joseph, the Education Secretary, to intervene and transfer the funding of teachers' salaries from local authorities to the national exchequer.

"Bromley deny these teachers are being sacked for incompetence (they declare they have separate procedures for this), but they simply cannot pay the full teacher employment bill that would be required to maintain existing staffing levels, irrespective of the level of rate support grant," he adds.

"The task has presumably become too great and therefore they are prepared to sacrifice essential elements of the curriculum rather than to place an extra burden on the ratepayer. This has serious implications for education nationally."

Council takeover

The British Council is to run a new scheme for the recognition of independent English language schools after the withdrawal of the scheme run by the Department of Education and Science. The new scheme, which will extend to include part-time establishments, will be introduced in April.

People

Mr Carlton Duncan, a Jamaican, aged 41, has been appointed headmaster of Wyke Manor Upper School, Bradford, becoming the authority's first black headteacher. Mr Duncan is a member of the Lord Swann committee of inquiry into the education of ethnic minorities.

Mr John Love, aged 45 and a former head of the English department of Duffryn Comprehensive School, Newport, is returning in September as the schools headteacher.

Mr Stuart W. Hockey, aged 46, a housemaster at Marlborough College, will be the next headmaster of Christ College, Brecon, succeeding Dr John B. Cook, who is to be headmaster of Epsom College.

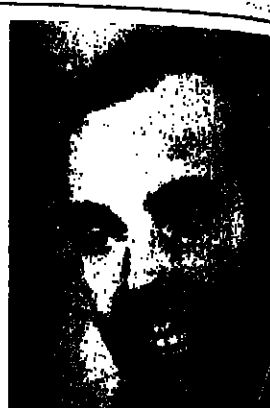
Professor Malcolm Skilbeck, Director of Studies at the Schools Council, has been appointed Chairman of the World Education Fellowship. He succeeds Mr James Porter, Director of the Commonwealth Institute, London.

Mr Eric Hewitt, vice-principal of Highbury College of Technology, has been appointed principal of Reading College of Technology. He succeeds Dr Albert Cumberland, who is retiring after 10 years, on August 31.

Sir Robert Clayton, technical director of GEC, and Professor A. J. Forry, of the Department of Physics, University of Warwick, have been appointed to the University Grants Committee for five years from February 1.

Mr Roy Sowden, head of the Colonel Frank Seely School, Calverton, has been appointed headteacher of Oller-ton Dukeries Comprehensive School, Wimsey Lane, New Oller-ton. He succeeds Mr John West, who is retiring after 17 years.

Mr Robert A. Arculus has become president of the Association of Principals of Colleges. He was chairman of the Association of Colleges of



Robert Arculus

Further and Higher Education 1980.

Mr G. R. Hancox has been appointed lecturer in music education at Christ Church College, Higher Education, Canterbury.

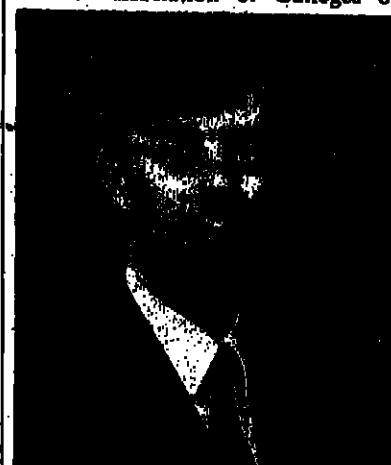
Mr J. D. Davies has been appointed principal of Bridgend College of Technology, Mid Glamorgan, at present principal of Huddersfield College of Further Education, Lancashire.

Miss Jan McKenley has been appointed a member of the Group on the Youth Service, 26 and is a lecturer in careers education at Hackney College.

Mr Anthony Markham has been appointed headteacher of Black Junior School, East Grinstead, succeeding Mr K. J. Morgan who starts a new job in East Sussex.

Professor Alan Day, Professor Economics at the London School of Economics, has been appointed Pro-Director for a second period three years, from October.

Rev Myra Blyth has been appointed youth secretary for the British Council of Churches. She will succeed Rev Michael Doe.



Stuart Hockey



Malcolm Skilbeck

Unions kill youth sports training scheme in Brent

A scheme financed by a £100,000 grant from the Manpower Services Commission to train youngsters as community sports leaders in the London borough of Brent has stopped because of trade union action, it was claimed last week.

"It is very unfortunate when a trade union puts the boot in on a scheme of this kind," Mr Peter Lawson, general secretary of the Central Council of Physical Recreation said.

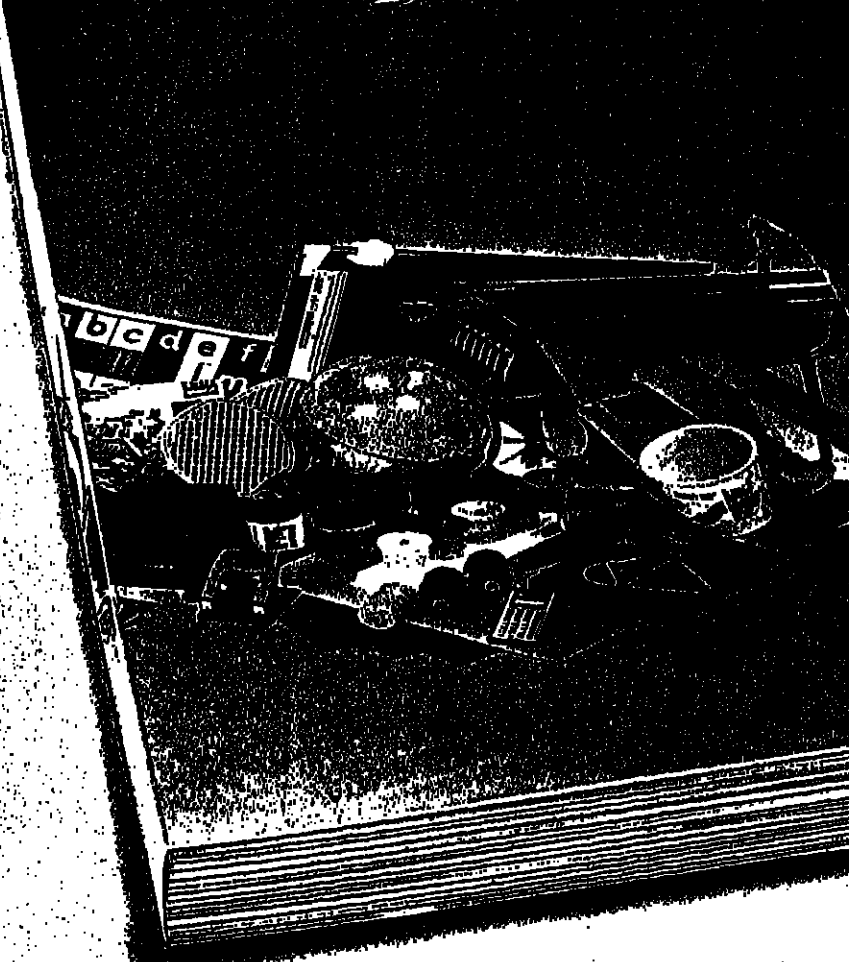
"Speaking at the formal launching of a national scheme in London, he said: 'Our attempts to get this going with a bang have in a way imploded.'"

The scheme, the result of two years preparatory work, is already working in Newcastle upon Tyne, Portsmouth and Buckinghamshire, and has the support of the MSC, the Home Office and a large number of organizations concerned with sport and the welfare of young people.

"At Brent, a £100,000 investment by the MSC has fallen to the ground because of trade union objections to what we are trying to do," Mr Lawson said.

E.J. ARNOLD SETTING NEW STANDARDS

E J Arnold
Educational Supplies
1982/1983



BACK UP SERVICE

Our representatives will be visiting schools during the year, attending over 40 major exhibitions throughout the country and our customer service department is always available to help you in any way. So on the road, at Head Office and in the warehouse you can rely on Arnold's expertise and support.

SPECIALIST

CATALOGUE SECTIONS

If you find that your own specialist area of responsibility is covered by just one or two sections of the catalogue, then we would be pleased to send you a personal copy of the section(s) you require. Just complete and return the coupon below.

STAYING AHEAD

As market leaders we are always seeking innovations to maintain our position

and later this year we will be talking to education authorities and teachers about our catalogue and future developments.

If you would like to air your views we would be delighted to include you in our survey—please tick the relevant box in the coupon.

Please send me a copy of the following section(s) from the 1982/83 E.J. Arnold Educational Supplies Catalogue and/or include me in your survey.

EARLY YEARS ☐ TICK ☐ ARTS AND CRAFTS ☐

MATHS AND SCIENCE ☐ AUDIO VISUAL, FURNITURE ☐

STATIONERY AND SUNDRIES ☐ AND STORAGE ☐

MUSIC ☐ CUSTOMER SURVEY ☐

Name _____ Position _____

School _____

Address _____

Education Authority _____

E J Arnold

Return to E.J. Arnold, Education Marketing Dept., Butterley Street, Leeds LS10 1AX.

Travel

travelplus
LIMITED

FREEPOST, 32 Liverpool Road, Worthing,
Sussex BN11 1BR Telephone (0903) 209855/6

School Travel Specialists

Fill in this coupon for details

- ☐ Summer Activities Holidays
in Switzerland 1982
- ☐ Wintersports Brochure 1982/3
- ☐ Wintersports New Year
Teachers' Introductory Tour 1982/3
- ☐ Tailor-made Wintersports tours
to exclusive destinations

Name _____

Position _____

School _____

Address _____

Tel _____

Cut out this coupon and return to
Travelplus Limited
FREEPOST, 32 Liverpool Road, Worthing, Sussex BN11 1BR

United States women's rights group attacks Federal Co. show policy on equal opportunities

Silver Snail for Terrel Bell

WASHINGTON: A national women's rights group has bestowed its Silver Snail award on Mr Terrel Bell, Secretary of Education, claiming that under his leadership enforcement of title IX, the federal law which prohibits sex discrimination in public schools, has come to a "screaming halt."

"As this country's leading educator, Secretary Bell appears to be bringing the poor practices of his home state of Utah to the Federal level," Mr Holly Knox, director of PEER, the project on equal education rights, said.

The PEER project of the National Organization of Women's Legal Defence and Education Fund regularly awards Silver Snails to individuals, institutions and states which it feels have shown "spectacularly sluggish progress" towards attaining equal education and employment opportunities in public schools.

This year PEER also singled out two Republican Congressmen for their efforts to limit the scope of title IX protection. Senators Orrin Hatch of Utah and Roger Jepsen of Iowa are currently sponsoring separate pieces of legislation which include elimination of title IX protection for school employment, sports and certain academic programmes.

"These are leaders in a negative sense," Mrs Knox said. "They are trying to place obstacles in the way of women in education."

Title IX states that no one, on the basis of sex, shall be "excluded from



Terrel Bell: progress is spectacularly sluggish

participation in, be denied the benefits of, or be subjected to discrimination under any education programme or activity receiving federal financial assistance."

Since its implementation in 1972, it has helped change discriminatory practices in a wide array of educational areas - from high school athletics to vocational training programmes - according to a recent report by the National Advisory Commission.

PEER fears any progress that has been made will be stymied or even reversed because of the Reagan Administration's efforts to reduce the federal role in education by shift-

ing responsibility back to the states. "With the emergence of Federalism, it is crucial that individual leaders realize the importance of their roles and their states' role in all areas of education," Mr Knox said.

The group is particularly concerned over efforts by the Department of Education and Congress to remove school athletic programmes and employment from the umbrella of Title IX protection.

Using data compiled by the Department of Education and the National Federation of State School Associations, PEER has released a report which measures progress made since 1977 in the education areas in each of the states.

The report shows "slow, steady progress," with an increase in the number of women in high school interscholastic sports programmes in 40 states, as well as an increase in the percentage of women principals in 29 states. However, the report states that these increases are "significantly inferior" to national employment opportunities for women in school administration.

"Although women account for nearly 70 per cent of the teachers in this country, if they were to progress at the same rate they have since 1977, would be the year 2012 before women would have equality in the school administration."

Deborah Kane

EEC/Craig Anderson

Consumer education plan for schools

BRUSSELS: The European Commission is drawing up plans to boost consumer education in schools in the Community.

In a working paper submitted to the EEC's Council of Ministers, which will now be circulated to EEC capitals for discussion, the Commission stresses the need for children to be educated in consumer affairs from as early an age as possible.

The Commission points out that the Brussels authorities do not aim to produce a standard European consumer education syllabus for use in schools or teacher training establishments throughout the Community. Differences in education systems would render such an approach impossible.

Action will be confined to examining the aims and content of consumer education in schools in EEC countries and looking at the ways and means which have been devised for incorporating the broad aims of consumer education in syllabuses.

Two aspects of consumer education are given particular emphasis. The development of various sales and promotion techniques have tipped the balance in favour of the consumer, and the Commission says that the consumer is no longer fully able to assess critically the merits of individual products. In addition, the growing body of legislation designed to protect consumer interests is useless if people are unaware of their rights under these laws.

"It might in certain cases," the Commission suggests, "be possible to avoid having to resort to legislative and regulatory measures by promoting education and thereby helping consumers to act in a more enlightened and critical manner."

Consumer education in schools could focus on two ideas, according to the Commission. The first would be to make the young consumer more discerning and able to make judgements between certain products. In addition to educating children about their legal rights. The second idea, which the Commission admits is

likely to be more controversial, is the fostering of an awareness of wider concerns, such as environmental and social consequences of particular consumption patterns.

The teaching of such ideas could be introduced into the syllabus in two ways - by creating a separate subject, or by introducing consumer considerations into existing courses. After an initial examination of pilot projects set up in 25 schools across the Community, the Commission considers the second approach to be the better of the two.

Because consumer education touches the day-to-day life of all children and adolescents, the commission believes that it should be taught to all children undergoing compulsory schooling. This would apply regardless of which type of course was being followed in order not to differentiate between various groups.

On teacher training, the Commission notes that, to date, few teachers have been given special training in consumer education although elements which are at least partially related or could be oriented in that direction are already present in some disciplines. Serving teachers should receive such training within their in-service training courses, whereas training in consumer education techniques could easily be introduced into pre-service teacher training courses as is now the case with such subjects as health education.

As for the community's own work programme, the Commission intends to draw up a detailed report on all aspects of consumer education when its 25 pilot projects are completed in June, 1983. Before then, however, the Commission intends to organize, together with the responsible national authorities, a series of national training seminars, either on a national or community-wide basis, beginning towards the end of this year.

In addition, the information obtained from the pilot projects will be contained in recommendations to EEC Ministers, detailing how and why consumer education should be promoted in schools.

Australia/Bill Purvis

25pc of pupils go private

SYDNEY: Almost a quarter of Australia's students are now attending private schools.

Non-government primary and secondary schools account for 23 per cent of all school enrolments - a percentage which has been steadily increasing from about 19 per cent for the past four years.

Figures released by the Australian Bureau of Statistics shows 2,980,000 children at school last year - a new 3,500 in 1980.

The continuing drift away from government schools does not seem to have caused a surprise, although there are several different reasons behind it.

Mr Gerry Tickell, president of the Australian Teachers' Federation says: "It's a direct consequence of the government policy of encouraging private schools."

However, government schools are also said to be failing to meet the educational demands of parents and so more and more people are paying the extra cost of sending their children to private schools.

New Zealand/Lindsey Hayes

Reading gains

WELLINGTON: School children in New Zealand are reading at a level 13 years ago and - according to a survey - teachers today are doing a better job in this field.

The survey by the New Zealand Council for Educational Research, looked at the reading comprehension and vocabulary standards of 14-year-olds in 91 schools.

Since the early 1970s, the council's development division has been carrying out regular checks on "normal" school children in the progressive Achievement (PAT) series. In addition several investigations have been held at six-yearly intervals for each year group.

The present study is the fourth and all but one of the original 14-year-olds in the original study and 1974, helped in the latest study

West Germany/Susanah Kirkman

Probation plan for medical students

BONN: Complaints about the poor quality of German medical students have led the Association of West German University Chancellors to propose the introduction of a practical probationary period for applicants.

Under the new plans, students will have to spend six months working under qualified doctors in a hospital and pass a practical test before they will be considered for training.

Mr George Turner, the Association's president, said the universities want to measure a student's stamina and willingness to accept the "dirty work" which is part of any doctor's job.

Many doctors have condemned the limited practical component of German medical courses. At present, most medical students only go on the wards in the final years of their course.

University lecturers have criticized the elitist approach of students who want to become doctors for the high financial rewards and social status the profession brings.

There is considerable kudos attached to studying medicine as the university entrance requirements are the most demanding for any subject. Many sixth formers apply simply be-

cause they have the high grade necessary.

In future, *Abitur* (A level) grades and the results of the practical test will count equally in the allocation of 75 per cent of university places. The best of the 11,000 places will go to foreign applicants and students from deprived backgrounds.

Previously, only those with grade A average at *Abitur* were accepted to study medicine. The new system will admit sixth-formers with C grades if their practical work is good enough.

The practical test will also include questions on basic science. A survey

in 1981 revealed that 75 per cent of first-year medical students could not solve basic problems in mathematics and physics - one cause of the dismal 57 per cent failure rate in last year's preliminary examinations.

Unlike in British universities, the sixth form study of physics and chemistry is not an entry requirement in German medical schools, anyone who gets the required grades at *Abitur* is entitled to study whatever he likes.

The new scheme will be modelled on a similar preliminary training period for engineering students.

Neo-nazi feelings stronger

COLOGNE: Efforts by teachers and education authorities to combat neo-nazi tendencies by improving teaching about the Third Reich in German schools seem to be making little headway. Evidence of a new wave of German xenophobia and right-wing extremism is mounting.

The Bonn authorities last month outlawed a neo-nazi group whose leader was arrested last year following a shoot-out with Munich police in which two of its young members were killed. In a series of raids Berlin police seized weapons, ammunition and neo-nazi propaganda from flats belonging to right-wing activists.

A poll last year reported that 79 per cent of Germans feel there are too many foreigners in the Federal Republic, a view shared by 15 university professors, who issued a manifesto calling for an end to "the undermining of the German people through the presence of several million foreigners".

In language reminiscent of the Nazi "purification" policies, the professors suggested the repatriation of Germany's 4.6 million foreign residents, almost 18 per cent of the population, to halt the "de-Germanization of our language, our culture and our nation."

The foreigners' departments would bring West Germans not only "social, but also ecological relief".

The greatest resentment against foreigners in Germany is directed towards the Turks, at 1.5 million, the largest single foreign group. Alarmed at increasing anti-semitism and right-wing attitudes among young Germans, all the federal states have recently intensified teaching about Nazism, now a compulsory part of the curriculum. Most pupils are confronted with the history of the Third Reich at 15, although Berlin children tackle the subject at 10 or 11, then at 15 or 16. History books are being revised to include more information on the Holocaust.

Yet despite more emphasis on this subject many children are still ignorant about Judaism and disbelieving of what happened. Teaching about Nazi extermination policies often meets with rejection and indifference

from many schoolchildren, according to German history teachers who recently met with representatives of Cologne's Jewish community to discuss the problem.

Many of the abiding ideas children have about the Holocaust are handed down from parents and grandparents, as a Cologne sociologist discovered in research for his book, "Are we anti-semitic?" As there are only 30,000 Jews left in Germany, out of a population of 50 million, anti-semitism is not the result of present-day events concluded Professor Alphonse Silbermann: many Germans have probably never met anyone Jewish.

But after examining the views of 2,000 Germans, Professor Silbermann found out that anti-semitism is "marked" in 20 per cent of Germans and latent in a further 30 per cent. Herr Ernst Simons, a concentration camp survivor who has taught in German schools for 30 years, is convinced that little progress has been made.

Now retired, he gives talks on the history of Judaism and anti-semitism in secondary schools and shows groups of schoolchildren round the Cologne synagogue.

Pointing out that such instruction was also common during the 1920s,

Herr Simon claims that today's schoolchildren are no better equipped to deal with fascism than their grandparents 50 years ago. He sees a mirroring of the events leading up to the Holocaust in the present hostility towards foreigners in Germany.

At the schools he visits, Herr Simons frequently encounters an aggressive attitude from pupils. "I am the one accused. The children ask me 'why are you still alive?'"

Some teachers meet with a total lack of interest in the Third Reich from their pupils. The Nazi period now appears as remote as the Stone Age to many children, who are often more concerned with topical themes such as the civil war in El Salvador.

History syllabuses fail to put anti-semitism and Nazism into context. In some schools, the persecution of the Jews is dealt with as an isolated aspect of fascism and is dealt with in two lessons.

In one Cologne sixth form, the topic was left to an 18-year-old Jewish pupil. "If I hadn't volunteered to write a report on the persecution of the Jews, we wouldn't have discussed the subject at all," Eva commented, adding that this was the first time the subject had been mentioned at her grammar school.

Susanah Kirkman

Israel/Benny Morris

Cabinet row leads to budget cut

JERUSALEM: The education budget will be cut by three per cent in the coming year, following a drawn-out battle between the Education Minister, Mr Zevulun Hammer, and the Finance Minister Mr Yoram Aridor. The cut of 300m shekels, which Mr Hammer has promised will not affect "the education of the children of Israel" and will not lead to redundancies of teachers, represents a compromise.

Mr Aridor had initially demanded a 7.5 per cent cut by the education system, but organized protests by the two teachers' unions and Mr Hammer's clout as one of the senior politicians of the National Religious Party, whose inclusion in the Government is vital to Mr Begin's coalition, forced the treasury to back down.

In the Cabinet, Mr Aridor demanded a five per cent cut but was backed by only three other ministers, and Mr Hammer emerged claiming victory.

However, a major crisis looms over the school system because Mr Hammer was forced, in the compromise agreement, to put his name to a statement that "no public sector workers will receive wage increases during the coming year." As both the primary teachers' union and the Secondary School Teachers Association see things, this contradicts Mr Hammer's commitment to continued implementation of the Etzioni Commission recommendations to improve teachers' status and working conditions.

Last May the Government awarded the country's 60,000 teachers a 10 per cent wage increase. And the teacher unions agreed to two extra hours to be spent in school.

However, since the June 30 general elections, in which the previous government won a second term in office, there has been no progress on implementing the Etzioni proposals.

Mr Hammer has assured teachers that "there is no connection between the budget cut and the implementation of the Etzioni proposals." But, at a meeting with teachers' union representatives he conceded that "finding the funds for (the implementation) is going to be a problem." The treasury is firmly opposed to any wage rise for the teachers.

Mr Hammer stressed that the cut will fall on such items as school buses, purchases of equipment and instruction - rather than classroom teaching. But the teachers are worried that the ministry may force schools to reduce hours for each teacher.

Talks between the two unions and the ministry about Etzioni are now focussing on reducing by one child the number of pupils in each of the country's classrooms, on in-service and degree courses for teachers, and on drawing up a comprehensive, unified pay and function scale for the teaching profession. The unions are giving the talks "a couple of weeks" to test the seriousness and direction of the Government's intentions.

Many of the late chairman's policies - including educational ones - are now being criticized and reversed. The Minister has twice recently made a point of reaffirming that many guiding educational principles enunciated by Mao were "correct and of far-reaching significance."

Speaking at a standing committee meeting of the Chinese parliament, Mr Jiang called for a return to Maoist values to counter individualism and anarchy which he said were influencing many Chinese students, who were "seriously lacking in revolutionary ideals."

The Minister's comments are in line with an official document published in July, which asserted that Mao had made mistakes, and listed them at some length. But it explained that his errors did not constitute "Mao-Tsetung thought," which was still basically sound.

China / Jane Marshall

Middle schooling to be extended by a year

who decides to stay on. Currently it lasts five years, but under the new guidelines it will gradually be extended to six.

The guidelines, contained in two draft programmes, give local authorities powers to make adjustments to take account of local conditions, and are specifically aimed at key middle schools - similar to Britain's old grammar schools, with the pick of bright students, more highly qualified teachers and greater resources - and middle schools "with relatively good conditions".

Educational selection, which was abolished during the Cultural Revolution, has unmistakably returned to China.

The programme for the key middle

schools also issues guidance on the direction secondary education should take. It calls for a solid educational foundation, especially in Chinese, mathematics and foreign language; and talks of the need for improved teaching methods and developing beneficial extra-curricular activities.

It proposes the gradual, experimental introduction of optional arts and sciences courses for senior middle school students, and also proposes to add vocational and training courses to the curriculum, to accustom students to the realities of work and to teach them some initial labour skills. These courses would include training in basic industrial

and agricultural production, service work and technical subjects.

They would help fill the educational gap created during the cultural revolution, when vocational and training secondary schools were nearly all closed for seven years. Enrolment at these schools, which had had 40,000 students a year before the Cultural Revolution, was only 10,000 in 1978, and today China desperately lacks workers trained in a number of vocational skills.

Meanwhile, Jiang Nanxiang, the Education Minister, has been spelling out the Government's current educational ideology. Although it has been policy since 1978 gradually to demythologize Mao-Tsetung, and

Letters

A case for extended answers

Sir, - One aspect of the draft 16-plus national criteria proposals has escaped public attention so far. This is the recommendation made for assessment techniques. I have two reports before me: "chemistry" and "science coordinating". In both the use of "objective" (multiple choice) and "short answer" questions receive greater support than the use of essay type or free-response questions. The working party for the latter recommends that up to two-thirds of the total examination marks may be given to "short answer" or "objective" questions.

This differential support for types

of assessment has disturbing implications when related evidence is examined.

1. Several investigations have shown that, for a given group of mixed candidates, the males perform more successfully than females on objective type questions, while the females perform better on essay type questions. It is likely that boys' and girls' performances along the ability range on essay type questions may form rather different profiles. Has this been investigated? In supporting "objective" questions and discouraging extended answer questions the

working party may be biasing results of assessment to the male and disadvantage the female. This is particularly unfortunate in the light of Equal Opportunity legislation and when efforts are currently being made to enable more girls to gain science qualifications.

2. In spite of the technical usefulness of "objective" and "short answer" questions, their extensive use may limit the development of young people. Long-term investigations by the National Assessment Educational Performance in the US have indicated that young peoples'

grasp of meaning is limited to superficial aspects of a topic. The investigators lay blame at the door of "short answer", "multiple choice" type testing, used extensively in standardized tests and by teachers in on-going school assessment in the US. This discourages reflection, with the corresponding loss of in-depth understanding and general communication skills.

In the UK the practices of examining boards exert much pressure on schools. Moreover, multiple-choice questions are readily available in published books of such items. The

greater availability of microcomputers to schools will increase pressure to use machine-marked tests.

I would suggest examining boards have a responsibility not to induce the use of such assessment techniques, nor to discourage the use of extended answers. We need to question very much more profoundly than is currently done what skills are calling forth, and thereby encouraging, by the use of particular assessment techniques.

J. HARDING,
Centre for Science and Mathematics Education,
University of London.

Numbers game

Sir, - Unlike Mr Norman Dombey (TES Letters, January 12), I write to express my appreciation of Bob Doe's report on December 18, 1981, of a meeting in Brighton at which the County Council sought to consult parents on the problem of falling rolls. The gulf between parents and officers and their differing perceptions were fairly described by Bob Doe. They are graphically illustrated in Mr Dombey's letter.

Mr Dombey quotes "the authoritative statement of an obstetrician" that the birth rate in Brighton has been increasing dramatically since 1976. That there has been an increase in the number of births from 1368 in 1976 to 1690 in 1980 is beyond dispute. But the same obstetrician then went on to assert that in 1981 there had been 3,000 births in Brighton (which may well be the case given the excellence of the local maternity unit which serves a wide area outside Brighton itself), whereas provisional figures issued by the Area Health Authority give the number of children born to Brighton parents that year as 1610. Faced with this apparent conflict of evidence, an audience of parents has a choice - a choice which in some cases will be influenced by wishful thinking rather than consideration of fact or even of probability.

Mr Dombey seeks to strengthen his thesis on future population trends by arguing that, when the trough in the national economy passes, Brighton should be one of the first towns

to benefit from economic recovery with a consequent net influx of children. The fact is that regardless of economic circumstances Brighton has experienced since the early 1960s a continuous net outflow of children. In the baby boom of 1965/66 about 2,400 children were born in Brighton, of whom 2,200 entered school at the age of 5. These children are now in their final compulsory year of education and number 1,722.

The truth is that these arguments about future population trends obscure the immediate educational issue. The present organization of schools in Brighton was based on the assumption that births in the town would continue at around 2,000. By 1986 the numbers in schools will have fallen more than 30 per cent below the assumed planning levels, and unless the problem is tackled, Brighton children already born will be the losers through more classes of mixed age-groups in the first schools, and a more restricted curriculum in the 8-12 middle schools and high schools.

Of course, there will be differing views about how the problem should be tackled, but it is a travesty to suggest that the issue is simply about the cost of maintaining premises. However, lest it be thought that East Sussex County Council has been lagging behind other authorities in its efforts to cut costs on premises, let me assure Mr Dombey that the authority has had a continuing programme of energy conservation measures over the past three years, and by the end of the next financial year

these measures will have resulted in savings of £2.5m.

J. A. CARTER
County Education Officer,
East Sussex County Council,
Lewes.

Profile systems

Sir, - The criticisms of some attempts at profiling made at Stoke Rochford may well be valid and most of the points of concern are already eliminated in the most recent developments in Ciyd and Gwent. It is a pity that the NUT president was ill-informed and then given wide publicity. The Welsh Office has not inspired any profile though they are watching developments.

Nowhere in the documentation put out by the Schools Council (Wales) is judgment required on "honesty". In a list of possible comments, from which schools could choose, if they wished, is the phrase "... has consistently shown a pattern of honesty (or integrity) at school". I would rate Mr Chambers' informants rather low in their integrity in putting their president in this position.

M. SCOTT ARCHER,
Chairman Welsh Secondary Heads Working Group on Pupil Profiles, Brynmawr, Gwent.

Sir, - A number of serious criticisms of profile systems have been reported (TES, February 19) giving the impression that all profiles suffered the same problems and weaknesses. However valid these criticisms may be of some profiles, it should not be assumed that they apply to all such schemes.

At Evesham High School we have developed a pupil profile system which avoids many of the pitfalls outlined in the report. We believe we have overcome these problems by:

- Giving local employers the information they require by involving them in the initial planning stages;
- Designing the scheme to enable pupils of the lowest ability to gain some sense of achievement, while still making it suitable for all pupils in the fifth year;
- Making only positive statements about what pupils can do;
- Avoiding making value judgements about pupils' characters, or personal qualities such as honesty;
- Developing a system which operates alongside examination courses without interfering with their progress;
- Deliberately keeping to a minimum the amount of extra work for staff.

In addition, what our profile does do is to give many of our pupils realistic objectives, credit for skills and achievements obtained in and out of school, and something more meaningful and valid than a piece of paper arriving in August, bearing a few numbers or letters.

MALCOLM BOWRING
Head of Middle School,
Evesham High School.

Pecking order

Sir, - The abridged version of Stuart MacLure's inaugural lecture to Keele University (TES, February 12) is perhaps one of the best reviews regarding the rectangular argument of "Education v Training v Work v Unemployment" for the age group 16-18.

The costings analysis highlights the wholly undesirable imbalance between the grants payable to young people on the intended options and they will instantly "label" them, creating a pecking order, instead of a comprehensive package of opportunities.

The four propositions outlined at the end of the article could well be taken as a "new rallying cry" for those people in positions of influence with, and concern for, the 16-18 age group.

Please print the propositions every week in a prominent place - eventually the message may get through, even to Mr Tebbitt and Sir Keith Joseph.

D. G. FENNY,
Vice-Chairman,
National Association of Youth and Community Education Officers,
Epping, Essex.

Aims of ORT

Sir, - I am writing as Vice-Chairman of British ORT (Organization for Rehabilitation through Training) with reference to the article (TES, February 12) by Mark Jackson entitled, "Chairman on Horrors of Training Dilemma". In which there were gross inaccuracies in the references made to ORT.

Mr Jackson stated that ORT is "An association originally set up by prosperous West European Jews" ORT was in fact set up by Russian Jews and the funds to support the organization were raised by a communal appeal to the Jewish masses who were largely poor. Some 12,500 people produced 204,000 roubles to establish ORT in Russia.

Mr Jackson states that ORT was set up "to try to help stem emigration from Russia by poor Jews". Under the Czar, the Jews were in fact offered the choice of conversion, emigration or starvation. Without a trade, those who remained would have starved. He says "the British wing is entirely a fund-raising group". This is not the case. I am Chairman of the British ORT Trust which was established to bring ORT-style training into Britain through pilot projects. We are operating a training scheme for unemployed people in Manchester, and an "ITEC" sponsored by ORT will be opening in Manchester this year. We are also examining this question of working with comprehensive schools, in order to bring ORT-style education for 14 to 16-year-olds into their curriculum and this has met with great interest from both schools and industry.

The article refers to "the international body whose work is mainly for third world Governments". ORT is in fact training some 120,000 students each year, and the majority of

them are training in technical and vocational schools in Europe, Latin and South America. In Europe we operate in both France and Italy.

Your reporter refers to our national secondary schools as "being a kind no longer favoured in Britain". I find this a peculiar statement when the recent Commons Select Committee on Education and Science in its report on provisions for 16 to 16-year-olds, made it clear in

"The curriculum for 14 to 16-year-olds should be closely related to the skills required of people at work in the everyday requirements of personal, family and community life".

Indeed, one of ORT's main objectives is to ensure that students leave our schools with not only a work skill but also a sense of dignity and self respect.

Had Mr Jackson done his homework, he would have learnt that David Young has been involved in World ORT since 1973 and is Chairman of its Administrative Committee. World ORT is the largest independent vocational training organization in the world with an annual budget of \$82m largely funded by the governments of the 15 countries within which our schools operate. We are in addition, operating 17 training programmes in 17 countries within the third world. The day-to-day involvement, in the day-to-day running of ORT's international network, has given Mr Young some insight into how youth training is carried out in many other countries.

Would Mr Jackson, I wonder, consider that irrelevant?

ANNE BELOFF-CHAM,
Vice-Chairman British ORT,
Whitehall Court,
London, SW1.

Games request

Sir, - I am engaged in a piece of research concerning the nature of the evaluation of games, simulation and role-play activity in education. I am at present seeking to recruit teachers (in all school subjects) who have used the technique, to help in answering a short written questionnaire concerning their own experiences.

If any classroom simulation or role-play is used in the research in the way I would be most grateful if they would contact me at the address below.

REX WALFORD,
Lecturer in Education,
University of Cambridge.

SEX EDUCATION AND PERSONAL RELATIONSHIPS

A three day course for teachers and health educators, to be held on the 8th-10th July 1982. Further details from the FPA Education Unit, 27 Mortimer Street, London W1 (tel: 01-637 7888).

Multi-ethnic jobs

Sir, - Your report on the first conference of the Association for the Teaching of the History of African Peoples (TES, February 5) said the conference heard how pressure from three teachers at two amalgamating schools had led to reappraisal of the importance of multi-ethnic education. The impression conveyed in your report was both sketchy and a little unjust, corrective words.

I write as the head teacher designate of Hatcham Wood, the school which Ms Alexander Council for Community Relations Education Working Party; and as the current head of Samuel Pepsy, one of the two amalgamating schools.

Samuel Pepsy and Collingwood, the other half of the coming partnership, have long been acquainted with the needs of minority groups. Each school has pioneered several aspects of multi-ethnic education. Your report described the creation of a new scale 3 post with responsibilities that include the oversight of multi-ethnic education.

Here is an account of what actually happened:

The original shadow structure was a consultative document. In it one of the two deputies was given duties which included responsibility for the school's multi-ethnic policies. During consultation it was suggested that I should consider allocating points to a teacher whose sole responsibility would be multi-ethnic education.

In my view this would have been a token gesture, resulting in an empty post with no power, and little influence. Instead, and in response to creative suggestions from the joint teaching staff, I planned a faculty containing myself, one deputy head, the director of studies, the MKO, the librarian, and a computer studies teacher. This faculty will direct and resource the school curriculum. Containing as it does, the head and one of his deputies, it will be a powerful faculty, and here the responsibility for multi-cultural education will rest, at the heart of the curricular planning.

In addition, tutor periods will be used to make clear our attitudes towards racism and sexism and all relevant parts of the syllabus will be designed to reinforce the school view in these crucial areas.

G. F. CLARKE,
Headmaster,
Samuel Pepsy School,
London SE4.

Sir, - Scandal of African History (TES, February 3), yes indeed. When the multi-ethnicism of the twentieth century European civil war is too handy for most schools, through that crack does Mr Davidson hope the curriculum? And who will force that crack to be closed?

Will the faint call for a widening of global historical horizons with the teaching of the history of "down there" (Africa, Asia, South America) always be drowned by the stridency of "Tudor and Stuarts, past, present, and forever"?

MIKE BARN,
17 Park Road,
Hullington,
Derby.

Power check

Sir, - I think the advice given by Lancashire Labour Party to school governors was excellent and I can only see why headteachers are complaining. Governors are political appointees and represent the community in making the head accountable for his decisions. Too many school governing bodies are mutual

understanding meetings with the head listening to the governors and the governors listening to the head and the head listening to the governors.

Governors should challenge the head, especially for what it

Evangelism question on the teaching of RE

Sir, - Your correspondent P. J. Rochford, "Catholic Parents" (TES, February 12) says that "... the (RE) teacher is not there (in the state school) to evangelize", and also, "the same applies to the teacher in the church school".

I recently trained as an RE teacher, at an RC college, and I was heartened to be told the same thing, and to read the passage in the book about the RE teacher's role being to present the subject as it were goods on display in a shop window with no obligation on the part of the pupil to buy. I feel strongly about this because of the pious washed-out spinners who tried to sell religious belief when I was a pupil.

At a recent interview for an RE post, at a C of E school, I was asked by the vicar on the board about the growth of my personal faith. During my answer I made a point of saying that I had never wanted to evangelize anyone. I was told afterwards by the headmaster that I had not got the job, and that I had been too honest on this matter.

Since then I have tried to find out, from priests and teachers, and others, the exact role of the RE teacher in a church school, and so far I have had no satisfactory reply.

S. THORNTON,
9 Grove Road,
East Molesey,
Surrey

Sir, - I was interested to read the correspondence on "Christianity as R.E. monopoly", though I am sorry that neither of your correspondents broke out of that triangle whose three corners are: The Comparative Approach, Christianity as the Historical Basis of our Society, and the inappropriateness of Evangelism in RE. At least since the publication of "Working Paper 36", that debate has been largely exhausted, and, though

does not contain. Education decisions are far too important to be left in the hands of headteachers, many of whom ruin the schools they are appointed to.

The L.E.A. will usually just support the head, and governors are often the only body that can check his or her dictatorial power. The head-teachers have hijacked the teaching unions and I am glad to see that the Labour Party in Lancashire is not allowing them to control the school governing bodies. May other areas follow their example.

GRAHAM LANE,
General Secretary, Socialist Educational Association,
49 Abraham's Point,
Ratcliff Road,
London, E16.

NUT v PAT

Sir, - I was particularly interested to read Richard Garner's report on the forthcoming annual conference of the NUT and the decision to step up its campaign against racism and discrimination. Racism and discrimination are declared incompatible with NUT membership. I am very glad to hear it.

Can I take it, therefore that the NUT will no longer discriminate against me, and indeed the other 24,000 members of PAT, by continuing to deny our association the right to voice their independent and democratic viewpoint on CLEA/st?

It has happened in Scotland so why not in England and Wales? Could it be that the NUT's definition of democracy for England and Wales is modelled on that of the East European states, namely, one official union and only one official point of view? If this is the basis for the formation of a single teachers' union as advocated by Mr Fred Jarvis, General Secretary of the NUT, then God help us. Before setting out to put the world to rights should we not practise what we profess to teach on the classroom floor and put our own house in order first?

MICHAEL G. M. KENNY,
15 Impney Close,
The Parklands,
Redditch,
Worcs.

it is possible for the humanist on the one hand, and the fundamentalist, whom we must now call a "creationist", on the other, to reiterate or polish their arguments, I find it difficult to see that either they, or people of more moderate views are taking the debate forward.

Some clarification of the issues involved is essential. Traditional RE was concerned with beliefs widely held and taught throughout Christendom in and before 1944, as Mr Hemmings says. This method is often called "Catechesis", and, since it is concerned with teaching specific doctrines, and working to their general application, it is deductive. Its weaknesses, in terms of current thought, is that it makes unjustifiable assumptions about what pupils, whatever their ethnic or cultural origins, believe. On educational grounds, therefore, it is to be rejected. Educational thinkers, though not always parents, argue for the replacement of this method by an "objective" approach, for the most part based on the study of more than one faith.

The academic discipline on which this claims to be based is called "Religious Studies", and it seeks to empathize with the faith, belief system or "life stance" involved.

The manifest impartiality of this approach is admirable, but it ignores two things. First, there are a good many people who are committed to Christianity in our society, its multi-cultural and secular nature notwithstanding. Those people have needs which a comprehensive (in every sense of the term) education cannot ignore. Secondly, the existence of committed people, and the importance of their commitment to their lives, has, over many centuries, been demonstrated by the discipline called "Theology". The place of theology in universities throughout the world is strong evidence for its academic re-

spectability, and its right to a place at the table when the school curriculum is being considered. In particular, it is implicit in what has been said above that, if there are people for whom Religious Studies is not inappropriate as a study in school, the place of theology as a discipline different from religious studies cannot be ignored.

On this issue, a lot of work needs to be done. There is much current debate about method in theology. Traditional syllabuses, in University or school centred on a study of the Bible (with ancient tongues), Patristics, Reformation Studies, and perhaps a little philosophy, may legitimately be called in question, both for lack of cohesiveness, and for their failure to offer that thorough critique of Christianity which is essential to academic rigour, and on which the justification for the inclusion of a discipline in the school curriculum depends. That this process should be going on in the churches, if they are to be credible in contemporary society, is obvious. It should be equally obvious that such a critique of Christian doctrine need not make unjustifiable assumptions about the belief of the person being taught. It is also to be hoped that this would provide that understanding of method, which curriculum planners regard as so important, and therefore, serve the pupil well in making judgements in this area throughout his life.

When I ran the Religious Studies Department at Uppingham, I was involved in producing, with Ampleforth, an A level paper in "The Theology of the Church and Sacraments", which is available from the Oxford and Cambridge Board, and which endeavours to consider objectively Christian Initiation, the Church and the Eucharist in Apostolic and Patristic, Reformation and

Modern times. At least one of my pupils came from the background of another great world religion, and a good proportion of them were not exactly convinced Christians. They could still see the propriety of the method and the interest of the subject.

In this area, the Church could really be a resource for RE, though some in-service training of clergy and teachers alike is required.

Rev JAMES BARNETT,
The Batt School House,
Corn Street,
Winney,
Oxon.

Sir, - In your article "Church schools in a secular age: What for?" (TES, January 22), you properly draw attention to the need for a reevaluation of admissions policies in the light of an overall decline in pupil numbers and other "changes" which have taken place in the social environment in contemporary Britain.

The urgency of the demand for new guidelines is echoed almost daily in the pages of the national press, teachers' and headmasters' conferences and diocesan boards throughout the country.

Despite the inherent difficulties in arriving at a uniform prescriptive role for church schools it will, nevertheless, be necessary to develop new approaches which will reflect assumptions concerning the nature of a multi-cultural and multi-racial society and also the presence of other faiths in the educational system.

For new approaches to obtain a general acceptance they must cater for religious as well as social requirements.

BERNADETTE O'KEEFE,
Senior Research Fellow,
King's College London.

A welcome relief! 10% discount on globes

48 cm (19") RELIEF GLOBE AND PHYSICAL GLOBE

Made in Britain and built to last. Each globe shows a detailed physical map of the world; the Relief Globe map is accentuated by contour mouldings. Both globes are available either with sturdy, solid mahogany base and tilted axis, or with suspension fitting. Amazing value.

48 cm RELIEF

Stand
0540 09038 7£80.00
Suspension fitting
0540 09058 9£90.00

48 cm PHYSICAL

Stand
0540 09035 2 £85.00
Suspension fitting
0540 09062 £70.00

48 cm SLATE SURFACE GLOBE

Ideal for classroom use, these spun aluminium globes show outlines of the continents in white on a dark slate background, and can be marked with chalk, then wiped clean for future use. Available either with mahogany stand and tilted axis or with suspension fitting.

48 cm SLATE

Stand
0540 09041 7 £50.00
Suspension fitting
0540 09060 3 £55.00

Take advantage of our special 10% discount offer by ordering direct from George Philip & Son Ltd., before 1st May, 1982.

All globes subject to VAT in the U.K. This offer applies to U.K. & Northern Ireland only. A charge of £5.50 is made for each 48 cm delivery drum.

George Philip & Son Ltd., Norfolk House,
Smallbrook, Queensway, Birmingham B5 4JL.
Tel. 021-643 8641. Reg. No. 843894 England

URGENT - Special 10% Discount Order Form

48 cm RELIEF
09038 7 £72.00
09058 9 £81.00
48 cm PHYSICAL
09035 2 £85.00
09062 2 £83.00
48 cm SLATE SURFACE
09041 7 £50.00
09060 3 £55.00

Qty Send to: George Philip & Son Ltd., Norfolk House, Smallbrook, Queensway, Birmingham B5 4JL. All globes subject to VAT in the U.K. A charge of £5.50 is made for each 48 cm delivery drum.

Name _____

School _____

School address _____

Date _____

Order No. _____

George Philip

All our tomorrows?

Ten years ago, in the essay reprinted here, Harry Rée looked ahead to what schools might be like in the 1980s. How much of this was a dream, and how much is now reality?



Michael St. John

The railings have gone for scrap; the hedges are one foot high; there are no gates to shut. Inside the buildings, the teachers have left their platforms; they are working at desks, moving around, attending meetings, taking tutorials. If there are doors they are often open, and the walls can be replaced or removed with ease. The school isn't under one roof; it's dispersed among and between this cluster of buildings which the community has provided for itself.

Everyone comes here: pregnant mothers come to the clinic for a check-up; mothers leave their toddlers at the playgroup; while they go to work or attend a class or meeting in nearby rooms. Old-age pensioners come to their club in the afternoon. In the evening, young couples and spinsters, teenagers and bachelors come to attend courses, to go dancing or swimming. There are halls, lounges and libraries, there are seminar rooms, workshops and laboratories, a restaurant and a bar, a self-service store and citizens' advice bureau, there are games fields, squash courts, a youth wing, a medical room and a gym.

Most of the floors are carpeted, and most of the rooms have comfortable chairs. The reading room is quiet, but there's a smaller, and even quieter room, with pictures and sculpture on view. Some of the rooms will be used by children only; some by adults only; a great many by both. At weekends there is usually a wedding reception, and often private parties go on in the evenings. School has regained its original Greek meaning: a place for worthwhile leisure.

'Children are much freer than before to strike out on their own, freed from the inordinate pressure of their classroom peers'

In the daytime it's mostly children who occupy the buildings. The young ones are usually grouped with their own teacher. They are working, usually in small groups, often in pairs, on projects, assignments, or on the subject of the day. The teacher, taking responsibility under supervision, for small groups, and attending to the inconstant demands of the smaller children. There will be some special lessons taken by specialist teachers - a short foreign-language session once a day, extra maths, remedial reading.

Secondary students are increasingly expected to organize their own time; after having been assigned work by different specialist teachers and tutors; this may involve working on their own or in groups of four or five; they will work from books or cards or tapes extracted from the library or from the school resource unit - this is kept stocked and up-to-date by the regional teachers' centre. At set times they will come together for a special lecture or a carefully selected film; at set times they will move into their seminar groups for free or guided discussions; sometimes they will have tutorials when their assignment work and their essays will be discussed and assessed. Outside

these times they are free to come or go; some stay in the library, some go home and work; some go into the town.

At the beginning of each term all students have had a private session with their tutors, and agreed the courses they will follow. These will be balanced between what must be done to achieve certain qualifications relevant to the individual's aspirations, and what will be done for pure interest and fun; there is of course no reason why the two should not coincide. Each student will have a record card on which will be indicated the various assignments, and details of the compulsory contact periods with staff. Tutors will enter their marks, assessments and tutorial comments in a special column.

Students will not be confined to the school during the day, but they may well be found there during the evenings, perhaps joining teachers and other adults on courses, or in handicraft classes, attending political meetings or concerts, or just relaxing, eating and drinking with friends and neighbours, or even parents.

The LEA has provided the school, but it is governed by an elected Assembly which meets in open session once a term, and represents all users - teachers, parents, as well as councillors. A governing body, acting as an executive committee of the Assembly, is formed from the members. The head is ex officio a member of the governing body, and he resigns of his office when he is elected to the governing body, or when he is elected to the governing body, or when he is elected to the governing body.

The present head started his career as a teacher, became a head of department, then

the curriculum organizer in a big high school, while doing this he was appointed part-time tutor to education students at a nearby polytechnic, who were preparing for the General Teaching Certificate. This kept him in touch with ideas current in the education department, and allowed him to supervise in his own school the teaching practice of a number of students. At the age of 42 he took a term off to attend a course in school administration, and shortly afterwards was appointed head of the community college.

Under him, and also appointed by the governing body, are four special deputies. One is responsible for the junior department of the school. Another is concerned with curriculum planning in the whole school for the full-time students aged between 13 and 18. A third is responsible for coordinating house activities, such as counselling, careers advice and home-school relations. He is the chairman of the houses committee; there are five houses, each with a head and deputy. There are three hundred students in each house. The fourth deputy is responsible for the post-school activities, dealing therefore with the youth wing, the adult classes and all the other evening and weekend activities. (He also teaches some French in school, which keeps him in touch with the staffroom).

The heads of department in the school work closely with the curriculum organizer, who can thus coordinate new plans and keep information flowing across the departmental gaps. Some of the heads of departments are closely involved in teacher training, as part-time tutors attached to the local polytechnic or college of education. They take student seminars, both at school and in the college or polytechnic, and supervise the work of students on practice and of teachers on probation who are attached to the school. Those who do this receive additional responsibility allowances.

More than half of the staff comprises teachers who have not only done their initial training and been awarded their General Teaching Certificate, but who have done either concurrently with their initial-training course, or afterwards while in service, some course to qualify them to take on special responsibility in the school, perhaps as head of a department, or head of house, or in some particular field such as sports or drama.

The school day, for teachers, no longer consists of seven or eight forty-minute slots, during which 30 or more children have to be taught. A teacher may well spend part of a morning with three colleagues and six students planning a course for the second half of the term. It may start, they'll decide, with a film or a lecture by a young teacher, or by an outsider. They'll be catering for a total of 30 students; after the first lecture these will be split up into groups of 10 for discussion and distribution of assignments. Everyone, students and staff, is given a list of relevant books and articles available in the school library, and resource unit.

The student teachers taking seminars are supported by their head of department, who will drop in on the discussions with the groups, and offer advice. For the rest of the morning the student teachers may be free to prepare work, but the staff will find themselves seeing groups of three or four students at a time, for half an hour, discussing work, suggesting reading and visits, films to see, and written work to be done.

Lunch is taken in the canteen by some children; others go to the town. In either case it's quite likely they'll not be eating with teachers, but with friends connected with the school, perhaps as library supervisors, parents who are qualified swimming instructors, or maybe a policeman who has come in to give a talk. Some children are eating their sandwiches outside, or they may be sitting at lunch with teachers who have been taking them the previous period for a tutorial, or with a group of friends who left recently and who have come back to listen to a lunchtime disco. Some are working in the library at their assignments.

In the afternoon some of the teachers may be off duty, but they'll be on again in the evening, taking an adult class. Others may have quite normal lessons to give, in normal subjects (there is never total renewal). But the children have changed. How? And in what way are the teachers different? And finally, in what way do the training and preparation of these teachers differ from the familiar pattern of department and college courses of former days?

As far as the children are concerned, the new system of teaching and learning has not only had the expected educational consequences, but has brought with it social changes

too. We had come to accept peer-group pressures as a paramount influence during adolescence, but the new system has begun to weaken this. No longer taught always in a class, every lesson with the same group, the child is much freer than before to strike out on his own, freed from the inordinate pressures of his classroom peers; and this process is carried further because of the possibility in the community school of meeting and associating, especially in the evenings, with adults other than teachers, and indeed with teachers who are increasingly becoming indistinguishable from other adults.

The teachers have joined a multifarious profession, where the jobs to be done in the school and in connection with the school are widely different in the demands they make, the qualifications required, and in the actual experience they offer. Teachers moreover don't expect to spend their whole career in school, their professional life is a series of variations on an educational theme, involving not only joint appointments (for example, the local authority music adviser, who serves also on the staff of a college) but also periods of secondment from the school to the Inspectorate or to administration, thus ensuring that good teachers move out of school but are not tempted permanently to stay away. And they are drawn back by good prospects - not only financial, but by prospects which don't limit them to standing in front of a class for most of their working week. But of course, some may later move again, permanently, back into the field to which they had been seconded.

This change in teachers' experience has been matched by a change in what is expected of teachers by children, by parents and by society in general. In the days when teaching children was all done in classrooms in front of a single



Peter Boyce

The school marm and the martinet have joined the dodo: with them has gone the shadow of dominant authority in which the children lived'

large group of 30 or more, and when the attempt had to be made to keep the whole group working at about the same pace, on the same subject, the first necessity, before the teacher could begin to teach, was the power to dominate and to control the squad. This necessity has been magical; the school marm and the martinet have joined the dodo. With them has gone the shadow of dominant authority in which the children lived.

Concomitant with teachers has become the general public and teachers has become far less formal and awkward; the attitude towards teachers has also changed; the uncertain mixture of awe and disengagement, left over partly from school days, has been largely replaced by

feelings of mutual respect and friendliness, much more comparable to the feelings of a patient or his family towards their doctor; often the same social reactions will be expected of the teacher as we have traditionally expected of the doctor - approachability and indiscriminate concern.

At the same time the professional style and the day-to-day life of the teacher has now come to resemble far more that of someone working in the modern university, where formal lectures have become much more rare than tutorials and seminars, and where students are expected to work on their own, without imminent or extraneous sanctions, and without threats of punishment held continuously over them.

Finally, the expectation that teachers must be a special genus, undetachable from the little world of childhood and adolescence, and world of childhood and adolescence, more than half human, has also disappeared. Thus the teacher is valued as highly as the private secretary, the accountant or the solicitor - and is equally difficult to recognize.

How and where are teachers trained for this

'School has regained its original Greek meaning: a place for worthwhile leisure'

new world? And for how long? And by whom? The traditional pattern of training has been broken and re-formed. Student teachers are no longer trapped at the end of a sixth-form course, for they share the initial stages of their training - of their tertiary education - not only with future social workers, but with young people who may be expecting to become architects, insurance clerks, accountants, or who simply have not yet made up their minds. And when the time comes for special professional courses to be taken, the student teachers are not directed into a special institution for themselves alone.

Courses and institutions vary in what they provide, and students can move, without much difficulty, from one to another. Auxiliary teachers can start earning after two years of training, which includes much practical experience. Normally, student teachers stay at least three years to achieve their General Teaching Certificate. This gives them the right to teach, but it would be more for anyone holding only the GTC to be given any special responsibility.

The pattern of the courses varies from institution to institution, some offering a much wider academic element than others, some offering the academic element mainly at the beginning of the course, others concurrently. One feature of training has become common: teachers have come to recognize that they need to shoulder a much heavier share of

the training burden than they have taken on in the recent past. This involved two changes. They had to insist that time and money should be provided for those teachers who took on this load; they had to agree that those who did so would have to be conversant with and not hostile to the current doctrines of the professional trainers of teachers.

As a result, at least half of the GTC course takes place in schools, and is supervised by teachers who work partly as teachers under the authority of the school, and partly as trainers under the authority of the department or colleges. At the same time those working full time in the colleges or in the education departments of polytechnics or universities will often be seconded teachers, and often the school staffs will include a proportion of seconded trainers. Graduates who have not followed concurrent courses involving education will have had to take a two-year course to get the GTC, and in many departments this includes a four-term sandwich in schools.

A large number of teachers with the GTC are encouraged by pay and ambition to move on to positions of responsibility or special skill, but to do this they need to follow additional courses which may last one year, and which lead to fully qualified teacher status, with a commensurate increase in salary. Some of these courses can be taken part time, but most will demand some continuous study. They are designed with specific future responsibilities in mind, and each course will prepare teachers for a limited range of responsible jobs, both in schools and outside. Only these fully qualified teachers would be offered posts such as headships, head of a department, counsellor or housemaster; and the same fully qualified status would be necessary to join the Inspectorate or to supervise students in training.

The courses in all training institutions have been modified to allow for a large element of individual and group work, which matches the method which students are expected to practise when they get into schools. During the initial-training period the students will have become used to associating professionally with teachers and lecturers, and even with parents. They will have taken part in discussions about the planning of school courses and will have been expected to play an important part in the whole life of the school, extending into the evening and the weekend activities which, because they are open to the whole community, may have had little to do with teaching and teachers.

Thus the school or schools where they have done their practice will have given them a taste for living in the wider community. The school has been seen as not a mere work place, visited between nine o'clock and four by conscripted children and salary-conscious adults, but a living collective, an open but inclusive community, with disparate activities and aims. These aims add up to one: to provide the opportunity for everyone in the neighbourhood to involve themselves, if they want to, in creation and re-creation.

Through reading and discussion, through listening and performing, through study and through play the community school has become an educational generating station, preparing not only the child for a full life in the community, but offering parents and other adults a fuller share in life, and giving to aspirant teachers an opportunity to prepare themselves effectively both for their professional job and for living.

The picture projected above is not altogether fanciful. Schools something like the one imagined here are already operating, for example in Cumberland and Cambridgeshire. More sophisticated versions are emerging, for instance in Leicestershire and Nottinghamshire. Experiments in teaching practice for students already involve teams of them working under schoolteacher tutors, who receive pay for this extra work, for instance in Leicestershire and London.

As far as the training and preparation of teachers is concerned, action is, of course, required by the government, by universities, by colleges and polytechnics, by UCET, by the ATCE, by the NUT and other teachers' associations, and not least by the local authorities. Is this too much to ask of an ageing England? We need to remind ourselves that education is wedded to the faith that the ideal and the actual can be made one - otherwise we flounder and perish.

This essay first appeared as a chapter in Dear Lord James: A Critique of Teacher Education, edited by Tyrrell Burgess, and published as a Penguin Education Special in 1971.

Riot acts

The dramatic impact of Chronicle's programme *Riot* underlines the paradox that riot is an expressive and effective rather than an effective force, having much in common with carnival and collective rituals. As its complex history unfolded, *Riot* was strengthened not merely by the compression into its small space of a multitude of facts and figures, but by the thoughts that were flung on to the screen as the stones and bottles flew.

As riot succeeds riot we see that we should not ask what our riot-shaken country is coming to, but recognize that we have long been already there. The ruins in Bristol after the riots of 1831 look uncannily like the riots in Bristol today. For the last two or three centuries, said *Riot*'s commentator and co-writer Simon Winchester, Britain has had an enormous number of riots and disorders in its streets, and he and his producer Antonia Benedek affirm that as a consequence "social historians have come to regard the riot as a vital part in the development of our democracy and in the growth of social and political reform". It is the exact nature of that vital part that is so subtle and about which this edition of Chronicle made many suggestions and suggested still more.

Riot made clear that, historically, the carnage of violent riots has been strikingly uneven. Between 1730 and 1840 only five men were killed by rioters, but more than 450 rioters were killed by troops or police. The pressure on people to take to the streets must have been strong indeed for men and women to face such odds; and this programme suggested, as would Aristotle, that it is not merely suffering that drove them to revolt but outrage at perceived injustice.

Communities where riots take place tend to be possessed less by yearning for a better future than by bitter grief that what they had in the past has been stolen from them, and occur when they refuse any longer to be the unequal victims of painful change. In this

Last week's edition of the BBC programme Chronicle examined the history of rioting in Britain, and argued that it was a necessary strategy for the oppressed.

Irene Brown suggests that its prime function has been as an emotional release

sense they are closer to the medieval rebellions before the English Civil War than to the innovating revolutions since 1789. Riots also occur more frequently in depression years when the reforms, that Winchester argues could end them, are least likely to be forthcoming and when rioters have lost belief in them. The great crowd fury of Nottingham in October 1831 was caused by the Lords' defeat of the Reform Bill.

Winchester and his team separate the disorders caused by violent protest against change from riots for change. Yet Peterloo, like Sharpeville, was not a riot and even the Chartist, demanding a new universal male franchise, were like the machine-breaking Luddites "standing up to progress". As E. P. Thompson illuminated in *The Making of the English Working Class*, these nineteenth-century artisans fought for the vote as a weapon against the loss of economic independence which had sustained their civic birthright as free Britons. Many of their leaders, like the non-violent William Lovett, had been apprenticed to crafts which were threatened by the new industrial technology as *Riot* saw today's industrial workers threatened by the micro-chip.

In the programme Mrs Thatcher was made to look foolish talking of peace and law against the background of screaming rioters, but what she said contributes to *Riot*'s theme. It is the harmony and peace of the rest of society, which Mrs Thatcher feels around herself, from which rioters feel excluded. Communities on the edge of anarchy believe they stand alone, and that the benefits of social order have already been denied them. They lie outside the political walls and yet paradoxically it is only when those who suffer have influential support within those walls that riots are followed by the drastic changes that conservatives fear, and revolutionaries dream of.

Both the fear of riots and the hope that riots will become insurrection are usually too great. Modern riots hurt their own communi-

ties and hurt the policemen who are obliged to stand in like suborned actors as the surrogates of a society that cannot otherwise be made to bleed. Without support in the legal channels of change most riots are followed, as this programme showed, by improvements in the technology of crowd control, and in the strengthening of the riot shields and military armour through which the rest of society strengthens its defences. The excluding walls grow higher.

Karl Marx seems only once to have felt that England was close to revolution while he was in exile here. In June 1855, a London crowd had noisily occupied Hyde Park in rage against the new Sunday Trading Bill and the new Beer Bill that closed all places of public amusement on Sundays, including the pubs, which were only allowed open on Sunday evening. Marx wrote "We witnessed the event from beginning to end and believe we can state without exaggeration that yesterday in Hyde Park the English revolution began." In that noise the traditional working class rivalry about the rich was mingled with "boiling and long constrained anger" that could not be contained. But he was wrong. Society had strong walls. Constrained this anger was and is.

On the fearful side, the sensitive conservative Matthew Arnold saw the danger of widespread moral anarchy in the rough crowd that a decade later in 1866 broke the railings of Hyde Park, still regarded as an exclusively middle-class preserve, when the gates were shut against them, and against a demonstration of the Reform League after the defeat of the 1866 Reform Bill. It was one exemplification of the destructive forces of self-will that, in his age, he feared would flood over the culture of Europe.

To him the disorders of Hyde Park expressed the essence of the disorderly Populace which formed a vast portion of the working class which "raw and half-developed has long lain half-hidden amidst its poverty and squalor... and is now issuing from its hiding place to assert an Englishman's heaven-born privilege... by marching where it likes, meeting where it likes, bawling what it likes, breaking what it likes".

The terrible sadness of days like Hexam's "Bloody Monday", made in *Riot* even more sad by the beauty of the north of England under snow, lay heavily on this programme. Martin Luther King once warned his impatient black patriots that "there is something painfully sad about a riot. One sees angry youngsters and angry adults fighting hopelessly and aimlessly against impossible odds. Deep down within them you perceive a desire for self-destruction - a suicidal longing".

Riots he understood to be the angry mourning of the defeated. When news of his murder came to Washington, riots flooded up streets

within a few blocks of the White House, but the price for what was then looted from broken Safeway windows was high. The aftermath of these riots has been the barred windows and the empty looted shops in black ghettos that have stayed boarded up because after the riots the black community found itself.

The poor, said the great American, John Adams, are invisible. The violence of the Chartist "Physical-Force" faction did not win working men the vote. More characteristically the rhetoric of armed power by popular leaders who had neither the will nor the resources to use it, provoked repression from a government which had both. It did however make their state of mind audible and visible to the middle classes and made it easier for those who were persuaded of the justice of their cause to argue the need to end their political exclusion.

The working man, argued John Stuart Mill, must sit in Parliament as well as voice his anger in demonstrations outside it, for revolutionary demagogues were the only ones to benefit from the inevitably alienated suspicion of any class or group left outside the national councils. Without representation, said Mill, the working classes, with however good intentions on the part of the legislature will never obtain complete justice (though they may receive mischievous courtship) and if they did not believe that they had obtained it. In our century it is social and economic representation which all people need equally and feel defeated without. Without it the excluded find solace in the tribe, and tribalism throughout the social structure has rarely been so strong in Britain as it is in 1982.

Tribalism, which is the result of division, divides. Tribe wars with tribe. The white and black rioters of Brixton defended their tribal heartland from what they experience as tribal harassment and deprivation imposed on them by outsiders. Yet, once a sanctuary in an already fragmented and mutually hostile society, like themselves fragment. First generation Poles despise the second and the third. The feathered Mohicans of Hard Core Punk withdrew from the shaven Oi, and away from them all the idealistic CrAss condemn all Punks who betray the tribe by compromise. Riots in Belfast in 1932 were over unemployment. The Irish tribal religious riots lack that purpose now.

Rioting communities seem more alien to the rest. The apparent indifference of the outside world gives proof of its enmity. The bases for political alliances grow narrower but unless reforming alliances can be made between those inside and those outside the British power structure violent riots, as *Riot* warned, will continue, and Bristol burn.

Success made simple

This month a new war breaks out in educational publishing
Mark Featherstone-Witty reports

booksellers. "With over two million students studying for low level exams in school and college... and countless others educating themselves... the market for basic texts is enormous".

The idea of self-teaching applied to school/college/professional subjects bloomed in the United States and was transplanted by Made Simple Books in 1967.

The British blossom, which began much earlier in 1938 and flourished with the Teach Yourself series, was to be taught more boldly with Advertising, Algebra, Alcoholism and Amateur Theatre at one end, and Yoga and Ydrubs at the other, with dictionaries which can explain the meanings of some of more obscure titles in between. Although Teach Yourself uses readable formulae like Fry and Fleish, school/college academic material is a fraction of their list and designed to be supplementary to main course material.

Twenty titles crossed the Atlantic and were adopted in the process. Once the suitable US originals dried up, Robert Postema was appointed in 1972 to expand the series with UK originals. Now 78 are in print with a further 24 commissioned. Irene Slade began Success Studybooks in 1971 after her apprenticeship with Made Simple. Her list has 23 titles now and other 10 on the way. M & E Handbooks, with 160 titles, began in 1964 although tended to concentrate on the profes-

sional and semi-professional market of law and business.

Whether self-teaching, made easy and passing examinations go together is another matter. Little self doubt troubles Made Simple and Success Studybooks. Macmillans describe their Master Series in similar ringing tones: "specifically written to suit the relevant low-level exams, each of the books is also a completely self-contained course, making them perfect for 'teach-yourself' purposes".

From its position in the teach-yourself market, Kevin Kewley, responsible for Pan's new Breakthrough Books to be launched this September, briskly rejects these claims with a word he requested be translated as "highly critical".

"Those books are basically text books with material geared towards examinations and questions asked on the end of chapters. They make no concessions to someone without a teacher behind them. If they were really concerned with the problems of self-study, they would at least get the advice of experts".

He appointed the National Extension College to be the editors of his series and arranged a rigorous writing process for would-be authors. A two day workshop with the NEC on writing self-study books was followed by writing one third of the text. This was edited by the NEC for self-study techniques, to be passed back to the writer for revision. This process was repeated for the remaining

two thirds of the book and finally for the whole book.

From another perspective - examination candidates, Tom Green, responsible for Let's Study Aids feels it is just not possible to be all things to all people. This led him to define his particular part of the market. "With the help of a market research agency, we got together a group of teachers and students to tell us what they wanted to pass exams. We then took this to another group of people for their reactions. This happened one more time until we reached the final concept stage".

He carefully defines his series as "exam companions". "We provide the most needed skill: meeting examiners requirements in terms of question analysis, answer practice, interpretation and the interrelationship of knowledge". Roger Bayliss of M & E Handbooks also narrows his market by describing it as "mainly practitioners and the more intelligent student market".

Whatever the actual merits of individual series, the deciding factor is of course you and your students. Macmillans, by their own admission, will be "very aggressive. We have already arranged two major and one minor book club deals and intend to offer appropriate discounts to booksellers". Which will be "Appropriate discounts to get the series established". Despite the enlightenment, it was a phrase being used by other publishers, although with one slight adjustment "to keep the series established".

It is possible that the battle of the giants may be fought overseas. Macmillan guess 90 per cent of their output will go there. Success Studybooks sell 33 per cent overseas, while Made Simple and M & E Handbooks sell 30 per cent overseas. But the feeling is, what with job under threat, the growth of FE provision and unemployment, that there has got to be gold in the home hills.

Newness and practicality

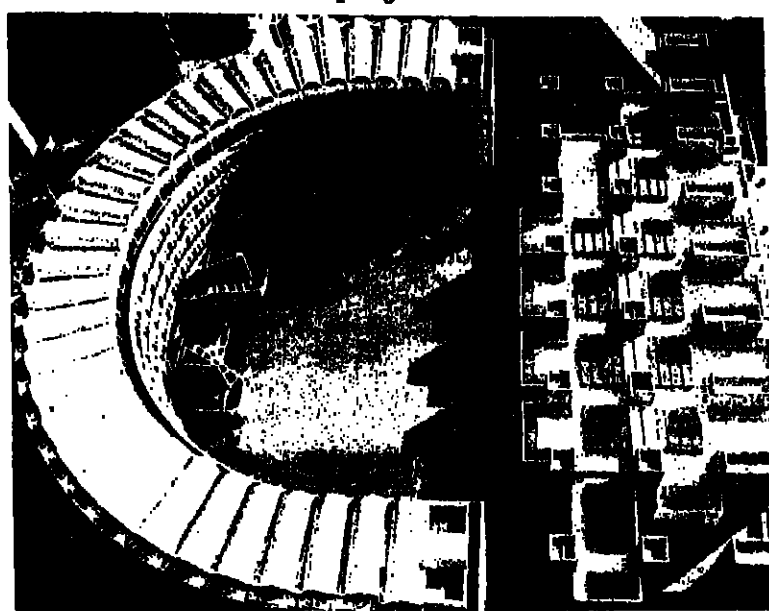
Anthony McCall on the Barbican's educational projects

The Barbican project has managed to attract criticism to a degree quite disproportionate to its real shortcomings; and in the process, its distinct strengths have been too widely overlooked. I believe this stems from our national distaste of things new, let alone truly innovative. Yet it is a national sport to berate our own achievements and bemoan the shortcomings of good new architecture, design or whatever, while admiring foreign successes. Thus the critics, in similar fashion, had a field day knocking the National Theatre before its opening (which admittedly, was much delayed); but once the public was admitted, all hostility vanished. The same will happen at the Barbican.

The National's £17 million building, cost now looks paltry in comparison with the Barbican's final figure of £143 million. It suffered the twin evils of delay and inflation, and was hampered by a restricted site: even a public area like the concert hall had to be dug some 50 feet down. And the Barbican-Moorgate tube link, which didn't help much. Noise and vibration from the trains had to be eliminated... by using London's only rubberized rail mountings and a soundproofing solution derived from the double-glazing principle.

Among the Barbican's innovations are two educational projects, designed to share top professional artists' experience and ideas with others, be they students or younger professionals. The Royal Shakespeare Company is to realise its long-cherished dream to re-establish its links with a drama school, started 45 years ago in 1937, but dropped during the war and never restarted. It will make its top staff members available to teach and work with students of the Guildhall School of Music and Drama; so whether they're actors, directors, designers, technicians, administrators, or publicity officers, there will be regular periods throughout the term with RSC members taking part. Joint projects are also planned, like student productions using directors, designers and so forth from the company. The arrangement is unique in this country, or even Europe. In the eyes of Tony Church, now the Guildhall's director of drama, but a long-standing character actor at the RSC and the permanent link between the company and the school, it provides the only solution to training our future theatre professionals properly.

"But," he observes, "we don't want to suck them all into the RSC when they leave. We will be breeding them for the whole profession. There will be no 'RSC way of doing things' in our approach. Besides, it's not what teaching is about, anyway". Church and RSC artistic directors have an agreement from Peter Brook and others to hold master classes and they testify to widespread interest among staff to taking part. The scheme, or one like it, originally got going in a small way, be-



fore the war, when the RSC's great leading character actor, Randle Ayrton, retired and started up the Stratford Memorial Theatre School in a private house in Stratford, using a wooden shed for a theatre. He died in 1940, and the thing collapsed in his wake. Nor was it ever restarted, although the post-war Old Vic School ran for a while under the aegis of Michel St Denis, Glen Byam Shaw and George Devine. But in those days before permanent theatre companies, the benefit to the school was harder to achieve when company came and went according to their acting or other professional commitments. As an entity, the company only existed from season to season as the Old Vic, and was assembled on that basis for the new series of productions. By the time some of the new members had become accustomed to the company, and were able to "teach" confidently, they were off again. The RSC however, will firmly book its staff and company members in advance, ensuring at the same time, that they are paid as usual, as if they were engaged on RSC work.

The Barbican's other scheme is arranged by the London Symphony Orchestra. Celebrated musicians and composers will become artists-in-residence, giving master classes and working with the orchestra. Yehudi Menuhin, Hans Werner Henze and Sir Michael Tippett will be the first to take part in the scheme, thought the numbers of regularly visiting international musicians will not be likely to produce any drop in enthusiasm for the idea. Vladimir Ashkenazy, Isaac Stern, Andre Provin and numerous other musicians will take part in the first year's music programme. Like the RSC-Guildhall link, it is the first such arrangement in the UK, and its benefits to those taking part need hardly be spelled out. Master classes, in the arts perhaps more than elsewhere, are the most

immediate, powerful form of education, once the basics have been mastered. Thus they serve to enrich a musician's or drama student's experience, perhaps even widening their horizons.

As a part of the overall Barbican artistic policy, the two schemes carry on a common theme. They maximize interplay between different activities, and in some cases, between different art forms, at the Barbican complex. In the wider context, for instance, an exhibition might pursue the theme of inter-war painting, while inter-war music, films or theatre could complement this theme, offering fresh aspects in another medium. Apart from being a fascinating approach in itself, this capitalizes on the complex's main feature: diversity. With the RSC and LSO as resident companies and other visiting companies (foreign orchestras, like Paris and Vienna), plus outside attractions of all kinds, the sheer variety of a daily programme will prove uniquely diverse. This is, after all, the largest arts centre of its kind in western Europe. First-run films, with lectures or discussions by film directors, stars or cameramen; a changing programme of sculpture and paintings; even a whispered light entertainment season with top international performers (Victor Borge, Liza Minnelli as the hinted calibre) in summer; these will be the more exciting if they manage to complement one another, rather than being featured, as they are elsewhere, in isolation.

As for the Barbican generally, it offers a warm, welcoming style of design, with catering facilities to suit different pockets. The formula combines exactly, to my mind, the right mix of newness and practicality. Despite its size, the architectural style is bold but human in scale, and complementary to the activities, as the architectural correspondents have noted. In itself, that is no mean achievement.

Whiff of melancholy

Cyrano de Bergerac. By Edmond Rostand. Oxford University Dramatic Society.

Edmond Rostand's *Cyrano de Bergerac* (1897) is like *fin de siècle* Dumas: bold, colourful, thrilling, idealistic, but giving off a powerful whiff of melancholy. His seventeenth century hero is a d'Aragonian with a nose - or rather a nose of clay. Unable to win Roxane, himself, he has the bitter irony which he has in his best friend's letters to her. Even today the story retains its appeal. Who would surely have been the first to notice - the poignant

Maria Djurkovic has designer have in abundance. Wisely sticking with Christopher Fry's dry, witty translation, the production rattled on apace, rapidly but not always respectfully.

In an attempt to "restate the dramatic tone of the original", they took some liberties, notably with set and costumes. Piranesi and Mervyn Peake were cited as inspiration. Wimpey Construction should have been, for Ms Djurkovic's basic set, cocooned the Oxford Playhouse stage in enough bare scaffolding to support a modest bare streamers, awnings and washing lines as necessary. From it dangled lighting and lethal catwalks: when Cyrano and his Gascons arrived like Adam and so many Ants the whole shebang resembled nothing so much as a Modernist disco in the course of construction.

In the face of all this iconoclasm, Charles Elliot's *Cyrano* was surpri-

singly staid. Tall and gangling, he moved about the stage like a shabby crow, an isolate, a figure of fun, but with a time in self-mockery sharp enough to skewer us to our seats. His best moments came, in fact, when he completely dropped his guard. Confronting the trio of principals were Alexander Chestnam and Julia Lane whose Roxane teetered on the edge of arrogance: one more toss of the head and we would have given up caring. As it was she got away with it.

Major problems with audibility in even the modest-sized Oxford Playhouse dulled some of the ensemble scenes. Mr Harbison has still to learn the dramatic possibilities of stillness; his lighting designer how best to illuminate the downstage area, but all in all an innovative, exciting production.

Hugh David

Anonymous hero

It is still only March, and I have probably heard what will likely be my most exciting orchestral performance of 1982. The orchestra was the London Philharmonic, the work was Rossini's *William Tell Overture*, the occasion was the last of the LPO's concerts for ILEA pupils in the Festival Hall and the conductor was an anonymous 10- or 11-year-old, picked at random from a very full auditorium, to whom presenter Richard McNicol handed the baton (and a white bow tie and a tail coat).

His "interpretation" - in a high romantic vein - had audience (and orchestra) on the edge of their seats throughout; though hardly deeply considered, it had in abundance that element so sadly lacking in most professional concerts these days - unpredictability. And last it be suggested that the LPO could in any case play the piece with no conductor, it followed his not insubstantial beat with a vengeance.

McNicol is bringing a much needed theatrical element back into concert giving. Earlier in the programme we heard a performance of the *British Grenadiers* magically transform itself from a school band version, with recorders, brass and percussion, into a full-blown orchestral arrangement from the LPO. For the young players, it must have been a thrilling experience.

His concerts for children have by now become well established through the Apollo Trust, but these involve a chamber orchestra and smaller audiences. This is his second series in collaboration with the ILEA and a full symphony orchestra - his former orchestra indeed, as he was second

flute in the LPO until last year. The theme of this year's three concerts was Time, a concept not hard to introduce through music. Sousa's *Liberty Bell* introduced march time. Kodaly's clock movement from the *Háry János Suite* had an obvious connexion, while Berlioz's *March to the Scaffold* (besides also being a march) gave rise to some thoughts on more metaphysical aspects of how we perceive time. Suddenly, time became silence - what is it, and how long does it seem? Then, in a piece of programming unlikely to be encountered by the paying public, we heard one of Webern's Five Pieces for Orchestra. It got rapt attention. Therefore, time became *Summerline* (Gershwin) and night-time (Mussorgsky's *A Night on the Bare Mountain*): "It starts just like *Jaws*".

The concert's aim, of course, was more than just a lecture on time in music. The sheer sound of a live orchestra was clearly a new experience for most of the children present, as was the visit to the hall itself. McNicol takes his audience through all the conventions of a symphony concert - when to applaud, and the bowing and hand-shaking routines which end the programme. After 90 minutes, many children were beginning to look like veterans of the South Bank. For some groups, the music was already familiar, since it had been introduced previously in the classroom; for many others, no doubt, the concert would not be the end of the exercise. If and when the LPO offer an adult series along these lines, I will be the first to subscribe.

Andrew Pegg

Arthurian trilogy

The Island of the Mighty. By John Arden and Margaretta D'Arcy. King Alfred's College, Winchester.

A decade ago, in 1972, the RSC produced a cut version of John Arden and Margaretta D'Arcy's epic trilogy *The Island of the Mighty*. It so licensed the authors that they withdrew permission for any subsequent production, by the RSC or anyone else. Thus things stood for 10 years, until third year students at King Alfred's College, Winchester, persuaded them to change their minds and flew them over from Ireland to see the first-ever full, uncut production of *The Island of the Mighty*, all four and a half Arthurian hours of it.

Impersonating King Arthur, Wild Cat Picts, numerous variously political poets and peripatetic Welshmen, the cast of 14, all final year English

and Drama students, remained on stage throughout the three plays. Out of many impressive performances David Fernando (King Arthur) and Mark Turner as a rather prissy Taliesin, chief poet of Strathclyde, were especially memorable. A mask converted a poet into a Pict, a snap lighting change and the shouted word "Woodland" changed the scene. Visually, dramatically the production was a stunning success, with bold Brechtian strokes filling in a tale of truly epic proportions. Less successful - though hardly the fault of the cast - was the Ardens' contentious use of the Arthurian myth to examine the role of free man or "poet" in society. Me, I'd throw them all in the lake if they couldn't do better than some of the banal Brecht-cum-Bowdler alliterative lines of Mr Arden and Ms D'Arcy.

Hugh David

Henze at Snape

A Weekend with Hans Werner Henze is a course to be given by the Britten-Pears School at the Snape Maltings on the weekend March 19-21. Henze, considered by many to be the greatest living operatic composer (*Elgy for Young Lovers* and *The Bassarids*, with libretti by Auden, and *We Come to the River* and *The English Cat*, with Edward Bond) will be present throughout. Films about

his life and work will be shown, he will discuss his music and ideas with other faculty members, present a forum on the young composer today, and conduct the Snape Maltings Training Orchestra in repeat compositions. There are still a few places available for observers and students. Details from: Britten-Pears School, Festival Office, Aldeburgh, Suffolk IP15 5AX, phone 072 885 2935.

ACADEMY 3

167 Oxford Street, W1. 437 8819

NOW SHOWING

The outstanding French film of Alain Fournier's classic novel

LE GRAND MEAULNES (A)

"THE WANDERER"

French dialogue - English subtitles

"As beautiful and haunting as the novel itself" - Guardian

"Surprisingly true to the letter of the novel" - Times Educational Supplement

FOR SCHOOL PARTIES, PLEASE TELEPHONE THE MANAGER

The full colour video training programme has been devised and is presented by Sionce Read, an A.S.W.H.A. Advanced Coach.

Topics covered

1. What the game demands
2. Passing using the push
3. Receiving and the back tackle
4. Running for space
5. Kicking for passing and shooting
6. Head strokes including penalty shoot-out
7. The coach's game

The programme runs for approximately 58 minutes and can be ordered in the following formats -

- Philips 1500/1700, U-Matic, Betamax, V.H.S.

Price £42 plus VAT

Produced by E.P. Publishing - publishers of the *Way of the Game* and *E.P. Short books*.

E.P. Publishing Ltd, Bedford Road, Eastleigh, Wiltshire, RG30 2NE. Tel 0703 62321

ep

extra

continued from previous page

tures with the objects. For the first two weeks this is what they did with enthusiasm, enjoyment and educational advantage. Then something much more exciting happened.

The third grade children down the corridor were allowed to know how to make objects move on the screen. And the effects they produced with this knowledge greatly impressed everyone including themselves (which is what really matters), their parents (some of whom went out and bought home computers) and the first grade children (who are the subject of my story). This was an unstable situation that lasted until a very well defined moment: the moment when someone in the first grade had acquired enough knowledge to ask someone in the third for an explanation and to understand the answer just enough to go back and do something powerful enough to impress the others.

Understand me clearly: this first grader understood enough (and scarcely enough) to produce an action, an action interesting enough to start a movement among the first graders. He did not understand what 270 degrees means. I am not sure that the number 270 in itself meant very much to him, let alone 270 degrees, but this is how real learning happens. You understand just enough to get going, to do something and to learn by doing and by discovery.

A week later I visited the school. A first grader explained to me how the curriculum had been "blown". The sense of subversion, of appropriating forbidden knowledge, contributed to the feelings with which he went on to explain the theory of headings and navigation then current in the little society of first graders at Lamplighter. "It's a code. Numbers are codes for directions". The problem had been reduced by the children to something they knew well. They hadn't yet cracked the code.

they told me in their language. But they were working on it. I lost track of this situation but have since seen others like it and know that given time such codes are cracked. And when the concepts of degrees, directions, and compass points are acquired in this way by personal appropriation, the knowledge has forever a special personal power, a special rootedness in the sense of oneself. What a contrast with how hard it is to teach children at a much later age the concept of degrees, and what a contrast with the alienated form.

Another dramatic example of appropriation happened among the four year old children at Lamplighter and has since been observed and extended elsewhere. The education world has a pretty firm idea of many of the things children of this age can't do. In particular they are not ready for reading and writing. Error: they are not ready for learning to read and write in the traditional manner. They are perfectly ready to master the alphabet if conditions are right.

The Lamplighter children were given access to a set of games using the computer. They loved playing games. But once more the most important events were not what was intended but what the children decided for themselves. After a few weeks a member of the nursery class called over a teacher to set up a new game. The teacher did this by typing at the computer keyboard. The child said "I want to do that". Another teacher might have said "Next year". But, instead she said "Sure, I will write on this piece of cardboard all the stuff I type... if you want to type it go ahead." The little girl did very much want to type it. It was gruelling work. At a typing speed of several minutes a word she kept at it for many weeks. Slowly, the speed went up. Slowly she learned to type without copying. She

continued on page 41

Information famine

Michael Thorne assesses the work of the Microelectronics Education Programme

The Microelectronics Education Programme (MEP) for England, Wales and Northern Ireland was announced by the Government in March 1980 and Richard Fothergill was appointed director of MEP in November that year and installed in offices in Newcastle shortly after with £8 million to spend over the period 1981-1984. In the eight months prior to Fothergill's appointment, £1 million had already been spent by the DES so that we are now very nearly halfway through the total lifespan of the programme.

It is, therefore, an appropriate point at which to take stock of what has been achieved so far in respect of MEP's stated aim: "to help schools to prepare children for life in a society in which devices and systems based on microelectronics are commonplace and pervasive".

A strategy document issued in April 1981 promised an emphasis on: Curriculum Development - both for Computer Studies/Microelectronics courses and in the introduction of Computer Assisted Learning (CAL) to the teaching of technical and business subjects; the training of teachers - both in-service and pre-service - and their trainers; and regional provision of information and resources.

Only recently has the last of these Regional Information Centres been established. Each of these is run by a consortium of L.E.A.s and their creation has represented a major task for MEP. During the programme, MEP will fund salaries and running costs to a total of £35,000 per annum. After that it is hoped that the centres will have proved their worth and that the L.E.A.s involved (typically eight per centre) will provide finance so that the service can continue.

A network of Diamond word-processors is being used to link the centres, via telephone lines so that resource created in one region can easily be communicated to another. At the moment only five centres are communicating in this way, due to problems with the installation of the necessary equipment by British Telecom.

In addition to the Information Centre funding, MEP provide each centre with £50,000 per year for in-service training and £55,000 for curriculum development projects which are vetted by the Schools Council. During 1981, advisory committees were formed to decide on suitable course structures for in-service training within the regions, the actual details of a course being left to local committees. (These committees are to be re-formed in the near future to consider pre-service training problems).

Ninety-five per cent of the total MEP budget for each of the next two years will go into the regions which are largely autonomous units. Scrutiny of regional courses is carried out by the six MEP national in-service training coordinators but day to day operation is locally determined and this has led to remarkable differences in the provision each Regional Information Centre makes for the teachers it serves.

According to the strategy document, for example, resources should be available for in-service and practical experience within reasonable distance from schools. Yet in Wales, the Regional Information Centre is in Cardiff, up to four hours drive from the North or West of the region, and open only between nine and five. On the other hand, the main London region ("Capital") has its base in the Kennington Computer Centre, which is easily accessible from any of the constituent authorities and is open until 9.00 pm, each evening.

The major mistake of these first two years has been that, for an organisation dedicated to spreading the word about information technology, MEP has done remarkably little to keep its informed of its progress, and consequently, in schools credibility of MEP is currently at a low ebb.

Teachers hoping for the emergence of CAL materials are generally aware of little apart from the publication of several excellent MEP financed programs from the King Edward Five Ways School, Birmingham. Cynics remark ruefully that erstwhile good sources of CAL programs - such as ITMA at the College of St. Mark and St. John, Plymouth - have dried up after receiving MEP funds.

John Anderson centres these criticisms with promises that 300 CAL programs will be released over the next few months, the better ones through the auspices of commercial publishers, the rest via the regional information centres. Given that these 300 programs have been produced by a disparate collection of individuals and organisations, and the large number of other projects commissioned by MEP itself and the regions, it is clear that the negotiations of contracts for this work is a major task. The actual wording of contracts is the responsibility of the DES who have been so slow in completing them that MEP actually underspent last year and will probably do so this, simply because contracts for commissioned work will not have been issued before the March 31 deadline.

'For an organization dedicated to spreading the word about information technology in our schools, MEP has done remarkably little to keep us informed of its progress'

In one instance a contract in respect worth £600 took two months to emerge. In another, a programmer has actually completed the work he was asked to do within the requested time scale from MEP, but has yet to receive a contract (let alone payment). When the DES were pressed, they said they had a contract but had lost it.

This is just one respect in which the MEP Advisory Committee might have shown its teeth, but it has not. Recently a meeting of the Advisory Committee was cancelled due to "lack of business to discuss". And this is all the more frustrating, given the amount of time it must take MEP staff to prepare submissions.

At the time of the announcement of £9 million for MEP, there was considerable debate on whether this money should be for software and not hardware. By the time the strategy document appeared, however, the DES had produced a scheme whereby secondary schools not already in possession of a microcomputer could purchase one of two approved models at half price, provided that two teachers from each school attended a training course (the so called INPUT course).

The strategy document saw the DES scheme as complementing the work of MEP and MEP has been involved in the design and production of the INPUT courses, in the production of the DES approved BBC Microcomputer, and in the BBC Computer Literacy Project. It is indeed vital that MEP should have been closely concerned with the DES scheme, but funding and organization of training courses should have been put into the hands of the manufacturers whose machines were to be supported. The BBC Microcomputer franchise is after all virtually a licence to print money.

Unfortunately there is a chance that the mistake could be repeated since it is widely rumoured that the DES is about to announce a similar scheme for primary schools. If they do, the training problem will be massive: forty-four thousand teachers will be involved. For this very reason, some regions are arguing that the scheme should not be extended yet. Others say that software is not available.



"To prepare children for life in a society in which devices and systems based on microelectronics are commonplace and pervasive"

What little software there is around will be enhanced considerably by the MEP primary programs shortly to be issued. These, and indeed the bulk of MEP activity in the primary sector, have been the result of work done by Bob Coates (MEP manager for computing) who has taken a special interest in the primary sector.

Last summer MEP put together submission to the DES asking for a 15 month extension to the program to make up for time lost to contractual and other difficulties. The DES has yet to respond but the decision is not favourable, it is feared will be nipped in the bud.

MEP funds are administered by the Council for Educational Technology who have provided characteristically reliable service. Nowhere is this more evident than in the payment of Mary Hope of EEF for MEP activities in the special education sector. In the event of shadow of her scheme has been implemented including centres in Bristol, Newcastle, Manchester and London from which ambassadors go to demonstrate the possibilities of microelectronics in special schools. One of the few worthwhile things to come out of the £1 million wasted recklessly around by the DES before a programme director was appointed.

About ten regional centres have received funds from the L.E.A.s as well as from MEP and a campaign to encourage the remaining L.E.A.s into similar activities has already begun. At Robinson College, Cambridge, a joint MEP, IBM, DEC, NCC, (National Computing Centre) CRAC and SMPD conference entitled "Educating the Information Generation" will be held this July. Directors of Education and Science Advisers will be told of the importance of information technology in a collection of people including the Minister, Kenneth Baker.

This conference is just one of several joint ventures MEP has arranged including IBM sponsored curriculum materials and STORC sponsored development of materials for teaching microelectronics.

The promotion of the whole thrust of MEP, namely to shift the responsibility into the regions and ultimately into every classroom, whether successful or not will depend upon the quality of activity at regional level and the ability of MEP to channel this activity into one and the same direction.

Richard Fothergill and his team are to be congratulated for their approach like this requires enormous entrepreneurial effort as does the successful production and distribution of software. This last will be worse as the volcano currently bubbling in the primary sector erupts. Consequently a person "skilled" in that area to complete the task and to bear the brunt of any initiatives.

Until April 30th Commodore have cut the cost of learning to £399

The Commodore '4000' Series is going to be teacher's pet until the end of April.

Because we've cut our prices even further, as part of our continuing commitment to education.

Take the Pet 4016 complete with screen for example, down from £550 to £399. How many other computer companies can make an offer like that? And deliver now?

But that's not all.

As a Commodore user in any educational establishment you can take advantage of our special education workshops. We'll teach you how to get the most from your Pet. And give you the chance to pick a number of educational programs from a selection of 200. Absolutely free.

Choose Commodore and you'll also have the back-up of a large dealer network. So wherever you're based in the UK you'll find you're never far from friendly help and advice.

If you're a teacher or work in a place of learning, take advantage of our offer.

Phone our hotline and place your order. Your hardware will be with you sooner rather than later.

We'll prove to you that not all 'education cuts' are a bad thing.

Our Education Cuts

4016 16k PET computer with integral screen	£550	£399
4032 32k PET computer with integral screen	£895	£499
2031 Single drive floppy disk unit (171k)	£395	£299
4040 Dual drive floppy disk unit (343k)	£895	£499

Prices do not include VAT



PHONE SUE THOMSON
ON OUR HOTLINE FOR
MORE DETAILS

SLOUGH (0753) 79292



**commodore
COMPUTER**

Please send me more details of the Commodore Education offer and the name of my nearest participating Dealer.
Send to: Commodore Education Department, 875 Ajax Avenue, Slough, Berks.
Tel: Slough (0753) 79292

Name _____ Position _____
Educational Establishment _____
Address _____
Tel No: _____

COMMODORE PET
Quite simply, you benefit from our experience

Nell Cryer and Pat Cryer BASIC Programming on the BBC Microcomputer

For beginners with no experience of computers, this comprehensive book has been written with particular reference to the BBC Microcomputer, the amazingly versatile new computer which has been causing so much interest and enthusiasm in the computing world. **BASIC Programming on the BBC Microcomputer** provides a step-by-step course on BASIC and teaches you how to write programs using the BBC's enhanced version of BASIC. It shows you how to make the best use of the machine and explains special features for which the BBC Microcomputer is renowned - including colour graphics, animation and sound.

Designed for use while you are sitting at the machine, this book actively involves you through frequent and clearly labelled activities on the computer and by providing points to think about and discussions of the material covered.

£5.95 paperback 208 pages 13-086407-3
March 29th 1982

Price and publication date are correct at the time of going to press but may be subject to change.

For further information please write to
Jean Walmsley at the address below.



Prentice-Hall International
66 Wood Lane End
Hemel Hempstead, Hertfordshire
HP2 4RG, England

Addison-Wesley Computing Goes to School! Computer Applications Packages

Project Director: Kathleen
Hennessey, UMIST
Project Co-ordinator: Paul Murphy,
Greater Manchester LEA

Background

This project has come to life through the collaboration of UMIST and Manchester secondary school teachers. It is intended to meet the urgent need for quality practical material on computer applications for computer studies teaching in schools.

A detailed technical survey of the applications selected was prepared at UMIST. Teaching materials and computer programs were then developed which made the best use of limited class time and computer facilities, yet retained the real-life flavour of the applications systems.

Introduction

The material provided in the packages is appropriate for computer applications courses within CSE, O-level, TEC and BBC syllabi, and could also be used in adult education.

The packages are available in the following formats:

- Telex Supermarket
- Trustee Savings Bank
- British Airways
- The Census Office

A further package of four programs will be available at the end of 1982, which will cover:

- Medical statistics based on work at Christie Hospital, Manchester
- Vehicle maintenance records used by Greater Manchester Transport
- Prestel
- Great Universal Stores mail order services

Components

The Instructor's Pack contains the following items:

- One 5.25" floppy disk containing all four programs

- One teacher's guide in two parts: - introduction and notes on the use of the materials to teach computer studies topics
- Specific notes on how to use each program in the classroom, plus a comprehensive glossary
- One book of black-line masters for pupil exercises
- One copy of each of four Pupil Books to accompany the programs. These books will also be available separately in packs of five.

Classroom Organisation
There are three stages to the teaching approach: The demonstration lesson, which includes the teacher's presentation of the Pupils' Books and the computer program; hands-on exercises in which pupils use the programs; and 'real-work' exercises not requiring pupils' use of the computer.

Compatibility
The disks contained in the package can be used on Commodore Pet Series 3000, 4000, or 8000 machines. The programs can also be used on BBC computers.

For further information on this and other computing materials available from Addison-Wesley, please complete the coupon below.

Addison-Wesley Publishers Ltd
59 Bedford Square
London WC1B 3DZ
Tel: 01-631 1838

Name _____
Department _____
School _____
Address _____

Addison-Wesley Publishers Ltd
59 Bedford Square
London WC1B 3DZ

extra Digital awareness

Jacquetta Megarry on reactions to the BBC Computer Literacy Project

The BBC Computer Literacy Project might sound like a successor to their Adult Literacy campaign. But whereas everyone recognises what a handicap literacy is in the Western world, not everyone agrees on a definition of computer literacy or whether it is a Good Thing. A major aim of the TV programmes is to demystify computers, to make them accessible to a lay audience and to motivate people to use a computer.

The scale of the exercise is hard to grasp. The BBC hopes to reach an audience of literally millions with at least some element of the Project - but the Project is aimed at much more than the regular broadcasting audience as there are a variety of strands, which can be followed independently. The six elements are:

- Television programmes (BBC 1 and BBC 2)
- The Computer Book (BBC publication)
- 30 Hour BASIC (National Extension College Course)
- Postal referral service (for local contacts and support)
- BBC microcomputer (Acorn computer)
- BBC software library

The Project has attracted a good deal of controversy in its early stages. Whatever its failings, there is no doubt that some of the criticism is ill-informed, some misguided, some dubiously motivated. There were a lot of right questions about the propriety of a government-backed corporation entering a market-place in competition with private enterprise?

Did those who predicted that Acorn could not produce the machines or that they might not work let commercial interests cloud their judgement? Did vested interests lead some to attack the language (BBC BASIC) as non-standard as if standard BASIC actually existed, (100,000 machines will create a de facto standard of their own...)

Now that the Project is under way, what have the reactions been on the ground? It's too early to make a solid judgement but the interim verdict is clear: great enthusiasm from the target audience despite the mixed reactions from the 'experts'.

Viewing figures for the TV programmes are much higher than expected, even though the first transmission was at 3.05 p.m. on BBC2. The Computer Book is selling briskly in the bookshops as are both versions of 30 Hour BASIC. BBC Publications have reprinted The Computer Book twice and had already sold 60,000 or so copies by early February.

There are a wide variety of associated courses mounted by Regional Information Centres with support and resources from the Microelectronics Education Programme, and the BBC Referral Service are dealing with over 100 postal enquiries a day. Their computer-held data base directs people to whichever of the 1000 or so agencies operate in their local area.

What of the machine itself and its software? It is common knowledge that there have been serious delays but the production line is now rolling. Acorn's difficulties have been accentuated by difficulties with one of the chips and the unexpectedly massive rush of orders - approaching 100,000 when 12,000 were expected. Even the sudden price rise has not stemmed the tide - the basic Model A now costs £299 without cassette or TV screen.

The first Model A's have been arriving at the RCO's since mid-January, ten months after some of the Directors tried to order them, but the Model B's still seem to have technical problems. The Department of Industry's Computer Competition prize-winners were among the few to get their machines early.

Some reactions suggest that the machine will have been worth waiting for. Most people seem to be excited about the machine's performance, and - significant in this age of galloping obsolescence - they appreciate its potential for expansion and its ability to 'talk to' other exciting devices. The TES hopes to carry a full review soon.

At present users are largely dependent on what software they can write or adapt for themselves, though the WELCOME package included with the machine has set a high standard.

As with The Computer Book, the text is refreshingly lucid and unstuff, and the BBC Publications team have done a superb job on the design; the neat book-like format should help sales through bookshops and chainstores.

The first major software launch will be on May 1 and if the BBC able to maintain a steady stream of software of this standard it will represent a major contribution to the field. The BBC has drawn up guidelines for software writers and they anticipate a rush of offers for the software library once the home enthusiasts get familiar with their machine's capability.

However exciting the hardware, it is in a sense the least important component of the project. Computer literacy is alive and well in many quarters with no access to a BBC machine at all. For example, Dublin High School in central Scotland has an Apple and a half a dozen Sinclair ZX81's all provided by its own fund-raising efforts.

Rector John McCarron was approached by Mr Peter Gartside of the Scottish Council for Educational Technology, who support the Computer Literacy initiative as part of their Open Learning Systems programme, to mount a course based on the BBC materials.

The course was publicised in the local paper and through the school's pupils. The response was encouraging and there is already a waiting list for the next course. All of the lucky first 16 applicants attend regularly.

Every Wednesday for 10 weeks they take part in workshop/tutorial from 7 p.m. to 9 p.m. using the National Extension College's 30 Hour Basic as a backbone. The TV programmes are available on the school's videocassette recorder, though the signs are that the group is becoming less willing to spend precious time on viewing them.

The school's secretary, Mrs Frances Wright, is an enthusiastic student. Although she describes herself as 'not at all technical', she is enjoying getting to grips with computer programming, through Clive Prigmore's study text which allows her to go at her own pace. Like many who have got their hands on computers, she finds the TV programmes less technical and instructional than she would like.

Because the school's local authority, Central Region, smile on self-help groups, and because it depends on existing facilities and equipment, fees are nominal.

Cooperation, initiative and local self-help make this a textbook example for social democrats. It is noteworthy that Dunblane applied to, but got no help from, the government-funded Scottish Microelectronics Development Programme, nor were they eligible for help under the Department of Industry scheme which, in effect, penalised schools which raised their own funds and gone ahead. It is good to see that a highly centralized initiative like the BBCs can help decentralised enterprises to flourish.

Enquiries about the Project should be sent to: BBC Computer Literacy Project PO Box 7, London W3 6XJ. The Network telephone number is 041 337 1774.

Transmissions of the repeat of the Directors tried to order them, but the Model B's still seem to have technical problems. The Department of Industry's Computer Competition prize-winners were among the few to get their machines early.

Some reactions suggest that the machine will have been worth waiting for. Most people seem to be excited about the machine's performance, and - significant in this age of galloping obsolescence - they appreciate its potential for expansion and its ability to 'talk to' other exciting devices. The TES hopes to carry a full review soon.

Competitive thrust

Six hundred entries have been received for the Department of Industry Schools computer competition. Secondary schools were asked to submit three to four thousand words on a computer application describing the use of a microcomputer involving pupils. The competition is being organized on behalf of the DoI by the British Computer Society.

Science and mathematics applications have been the most popular subjects; geography, environmental studies, library and careers applications form a large proportion of the rest with general record keeping and sports not far behind. Very impressive is the number of excellent submissions from special schools and also from ordinary schools displaying applications for use in special schools or with remedial groups.

Disappointingly most of the applications have come from schools which already have a microcomputer - only 50 do not have computers at all. The competition is seen as limited to the micro-in-schools scheme and is part of the campaign to get a microcomputer into every secondary school by the end of this year.

One hundred RML180Z computers will be awarded including five star prizes for ordinary secondary schools and five star prizes for special schools. The star prizes will be enhanced systems.

The National Electronics Council recently completed case studies of some of the schools which won prizes in last year's competition. They concluded that the computer had emerged as a powerful teaching aid. Educational packages were available on many subjects and schools were also developing their own material. Initially the computer had tended to be used in the mathematics department, but was subsequently used in many other departments, for example home economics and geography.

It was not uncommon, says the NEC report, "for the pace to be set by the students themselves and a particular impression... was that of the enthusiasm and dedication with the machine created among staff and students."

Principal uses were: school administration, class and group instruction, as a teaching aid, for students' projects and for more specific school projects.

All the schools regarded the computer as a positive asset and had plans for expansion. A frequently mentioned problem, however, was that the computer made heavy demands on materials, such as paper and discs. Although additional help had been given by local authorities and parents associations, the generally felt short of the way.

As an instructional tool the computer was widely regarded as superior to the more traditional methods, both in its ability to communicate to and retain the interest of a group.

Carolyn O'Grady



Mr Info. Tech.

Carolyn O'Grady talks to Kenneth Baker

In June 1980 Kenneth Baker wrote his own job description. In a paper entitled "A National Strategy for Information Technology" he called for the appointment of a Minister for Information Technology within the Department of Industry.

Such a minister, he said, "would have responsibility for the whole range of information activities within the Department, and for British Telecommunications. He would liaise with other departments and act as a spur to them, in such subjects as the training and education in computer skills; the policies of public procurement and their own use of modern techniques."

Six months later Kenneth Baker was that minister (Alan Butler filled the role for four months previously) and Information Technology not only has its own Minister but its own year - 1982. Most of the other points in the National Strategy are now on their way to being realised. All this by an MP who is an acknowledged "wet", and has been associated with the Edward Heath camp.

Mr Baker's attitude to Information Technology is entirely evangelical. Quoting from his National Strategy: "Industrial decline set in many years ago and governments of both parties have been too preoccupied with trying to stop that decline or to lessen its social results. Let us for once look at those areas where we can hope to expand and to create the new wealth to replace the dying industries... By far the clearest opportunity lies in Information Technology."

Like most missionaries he puts a great deal of faith in the evangelical potential of the younger generation. 30 per cent of the public, according to a recent MORI poll had not heard of Information Technology, but whereas adults may be frozen with apathy or dread when faced with computers and the rest of IT's paraphernalia (often, says Mr Baker, because of what he defines as an understandable but misguided fear that their introduction will lead to loss of jobs), children are "pushing each other out of the way in schools to get to the computer".

They are "much more digitally aware than their parents". Teachers, he maintains, are often taught computing by the pupils. Case studies of the winners of the DoI's competition for schools (100 microcomputers are being given as prizes to schools submitting the best accounts of how they would use a microcomputer) had revealed a tremendous amount of enthusiasm and it has been impressed by research in IEA schools which illustrates that great advances can be made in learning using micros "especially in motivating and assisting children who are not normally quick to learn".

But Mr Baker's prime goal in schools in 1982, and one that he is every secondary school by the end of the year. Asked whether this is a

Micros, he argues, are particularly effective for simulations. "The information and results can be re-



Kenneth Baker visits trainees in Hammersmith

vealed in a way that is much more vivid than a book".

In the forefront of Mr Baker's strategy for assisting education is the Micros in Schools scheme which offers secondary schools a choice of one of two microcomputers - the RML 380Z or the BBC Microcomputer - for about half price. Originally restricted to the 2500-3000 secondary schools with no computer equipment the grant has now been extended to those which already have computers.

There have been criticisms of this programme, mainly centering on the fact that only two machines were chosen or on the wisdom of the choice. However, these are usually countered by gratitude for the speed with which the scheme was implemented - in about six months compared with the much longer time it took the Department of Education and Science to get the admittedly much larger Microelectronics in Education Programme off the ground.

Also inhibiting criticism is the DoI's willingness to extend the scheme. It is, says Mr Baker, "demand lead", and already the original £4 million scheme looks set to exceed its budget by £1 million. Mr Baker has drawn attention to the fact that the scheme already covers special education, and has let it be known that he hopes to apply it to primary schools if agreement can be reached with the DES on an associated programme of training.

He is also considering proposals to give financial help to engineering departments in higher education. These plans are thought to cover grants for the purchase of robots and similar equipment.

But Mr Baker's prime goal in schools in 1982, and one that he is every secondary school by the end of the year. Asked whether this is a

Micros, he argues, are particularly effective for simulations. "The information and results can be re-

Micros, he argues, are particularly effective for simulations. "The information and results can be re-

Micros, he argues, are particularly effective for simulations. "The information and results can be re-

Micros, he argues, are particularly effective for simulations. "The information and results can be re-

Micros, he argues, are particularly effective for simulations. "The information and results can be re-

Micros, he argues, are particularly effective for simulations. "The information and results can be re-

Micros, he argues, are particularly effective for simulations. "The information and results can be re-

Micros, he argues, are particularly effective for simulations. "The information and results can be re-

extra

What's the use of microcomputers?

A bald question that needs a balanced and intelligent answer. You'll find it in *An Introduction to Microcomputers in Teaching*. The book doesn't assume you know how to program a microcomputer not does it teach you how to. But after reading it, you'll certainly know what a program is and how to tell a good one from a bad one. And, perhaps more importantly, you'll have a clear idea of the potential, the pitfalls and the practicalities of using a microcomputer in your teaching.

If you're already writing programs, you'll know that good programs need good graphics. You'll also know just how hard it can be to produce good graphics. The trick is to use machine code. *Microcomputers in Science Teaching* contains one of the clearest and most comprehensible introductions to machine code graphics on a PET there is. But it covers much else besides: how to interface a micro with lab equipment; testing and marking with a micro; and listings for over 100 programs. Plenty of imaginative uses for a microcomputer.

To: Janie Nicholas, Hutchinson Education, FREEPOST 5, London W1E 4QZ (No stamp needed).

Please send me an approval copy of the book(s) ticked below:

☐ *An Introduction to Microcomputers in Teaching* by A Nash and D Ball £5.95 (prov) non-net paper

☐ *Microcomputers and Science Teaching* by R A Sparkes £7.95 (prov) non-net paper

TES 1

'SIMPLY FILE' RECORDS SYSTEM (DBMS).

Selected by any key. Private alphabetical lists, mailing labels. Calculations, totals, averages. Fast, easy, robust and very versatile. DISK only £65. 500K 16K RAM. 100K 16K RAM. 200K 16K RAM. 400K 16K RAM. 800K 16K RAM. 1600K 16K RAM. 3200K 16K RAM. 6400K 16K RAM. 12800K 16K RAM. 25600K 16K RAM. 51200K 16K RAM. 102400K 16K RAM. 204800K 16K RAM. 409600K 16K RAM. 819200K 16K RAM. 1638400K 16K RAM. 3276800K 16K RAM. 6553600K 16K RAM. 13107200K 16K RAM. 26214400K 16K RAM. 52428800K 16K RAM. 104857600K 16K RAM. 209715200K 16K RAM. 419430400K 16K RAM. 838860800K 16K RAM. 1677721600K 16K RAM. 3355443200K 16K RAM. 6710886400K 16K RAM. 13421772800K 16K RAM. 26843545600K 16K RAM. 53687091200K 16K RAM. 107374182400K 16K RAM. 214748364800K 16K RAM. 429496729600K 16K RAM. 858993459200K 16K RAM. 1717986918400K 16K RAM. 3435973836800K 16K RAM. 6871947673600K 16K RAM. 13743895347200K 16K RAM. 27487790694400K 16K RAM. 54975581388800K 16K RAM. 109951162777600K 16K RAM. 219902325555200K 16K RAM. 439804651110400K 16K RAM. 879609302220800K 16K RAM. 1759218604441600K 16K RAM. 3518437208883200K 16K RAM. 7036874417766400K 16K RAM. 14073748835532800K 16K RAM. 28147497671065600K 16K RAM. 56294995342131200K 16K RAM. 112589990684262400K 16K RAM. 225179981368524800K 16K RAM. 450359962737049600K 16K RAM. 900719925474099200K 16K RAM. 1801439850948198400K 16K RAM. 3602879701896396800K 16K RAM. 7205759403792793600K 16K RAM. 14411518807585587200K 16K RAM. 28823037615171174400K 16K RAM. 57646075230342348800K 16K RAM. 115292150460684697600K 16K RAM. 230584300921369395200K 16K RAM. 461168601842738790400K 16K RAM. 922337203685477580800K 16K RAM. 1844674407370955161600K 16K RAM. 3689348814741910323200K 16K RAM. 7378697629483820646400K 16K RAM. 14757395258967641292800K 16K RAM. 29514790517935282585600K 16K RAM. 59029581035870565171200K 16K RAM. 118059162071741130342400K 16K RAM. 236118324143482260684800K 16K RAM. 472236648286964521369600K 16K RAM. 944473296573929042739200K 16K RAM. 1888946593147858085478400K 16K RAM. 3777893186295716170956800K 16K RAM. 7555786372591432341913600K 16K RAM. 15111572745182864683827200K 16K RAM. 30223145490365729367654400K 16K RAM. 60446290980731458735308800K 16K RAM. 120892581961462917470617600K 16K RAM. 241785163922925834941235200K 16K RAM. 483570327845851669882470400K 16K RAM. 967140655691703339764940800K 16K RAM. 1934281311383406679529881600K 16K RAM. 3868562622766813359059763200K 16K RAM. 7737125245533626718119526400K 16K RAM. 15474250491067253436239052800K 16K RAM. 30948500982134506872478105600K 16K RAM. 61897001964269013744956211200K 16K RAM. 123794003928538027489912422400K 16K RAM. 247588007857076054979824844800K 16K RAM. 495176015714152109959649689600K 16K RAM. 990352031428304219919299379200K 16K RAM. 1980704062856608439838598758400K 16K RAM. 3961408125713216879677197516800K 16K RAM. 7922816251426433759354395033600K 16K RAM. 15845632502852867518708790067200K 16K RAM. 31691265005705735037417580134400K 16K RAM. 63382530011411470074835160268800K 16K RAM. 126765060022822940149670320537600K 16K RAM. 253530120045645880299340641075200K 16K RAM. 507060240091291760598681282150400K 16K RAM. 1014120480182583521197362564300800K 16K RAM. 2028240960365167042394725128601600K 16K RAM. 4056481920730334084789450257203200K 16K RAM. 8112963841460668169578900514406400K 16K RAM. 16225927682921336339157801028812800K 16K RAM. 32451855365842672678315602057625600K 16K RAM. 64903710731685345356631204115251200K 16K RAM. 129807421463370690713262408230502400K 16K RAM. 259614842926741381426524816461004800K 16K RAM. 519229685853482762853049632922009600K 16K RAM. 1038459371706965525706099265844019200K 16K RAM. 2076918743413931051412198531688038400K 16K RAM. 4153837486827862102824397063376076800K 16K RAM. 8307674973655724205648794126752153600K 16K RAM. 16615349947311448411297588253504307200K 16K RAM. 33230699894622896822595176507008614400K 16K RAM. 66461399789245793645190353014017228800K 16K RAM. 132922799578491587290380706028034457600K 16K RAM. 265845599156983174580761412056068915200K 16K RAM. 531691198313966349161522824112137830400K 16K RAM. 1063382396627932698323045648224275660800K 16K RAM. 2126764793255865396646091296448551321600K 16K RAM. 4253529586511730793292182592897102643200K 16K RAM. 8507059173023461586584365185794205286400K 16K RAM. 17014118346046923173168730371588410572800K 16K RAM. 34028236692093846346337460743176821145600K 16K RAM. 68056473384187692692674921486353642291200K 16K RAM. 1361129467

extra 'Thieves came down from the mountains'

Virginia Makins on how the BBC Microcomputer was received in a London school

Belmont school in Hounslow seemed a good testing ground for the great BBC computer literacy project. It's a small, all-through primary with 220 children from several races and 22 nationalities. Two of its classes are special ones for children with learning problems.

We were a pretty average bunch of computer illiterates. The staff had no experience of computers, and wanted to find out more. I was around as a parent and part-time journalist to watch, and collect opinions.

So this term Mrs. Beth Peel, the deputy head, signed on for an in-service course on computers. I got myself 30 Hours Basic, the National Extension College's course in programming for beginners, and the top juniors started watching the BBC's *Computer Programme* and working on flowcharts.

We were all two steps in when the BBC microcomputer arrived - two in-service evenings, two chapters of self-instruction, two programmes of the series. But even so, the preparation was effective - the machine seemed fairly familiar, and we could begin to make it work.

It was a rather provisional set-up. The machine came with a provisional User Guide (which can shortly be traded in for the final, much expanded version) and we had a provisionally wired-up tape recorder.

The "WELCOME" programs that come as part of the package, to show the kinds of things the machine can do, were very popular with the children. They were competitive about the program designed to get people used to the keyboard, and enjoyed the rather faint music program.

But their favourite was a simulation game, called Kingdom. The task was to manage a set of rice-growing villages, taking decisions how to develop your population, between producing food and defending the village from thieves and floods.

There were loud groans when the players watched the land flooding, and thieves come down from the mountains, after bad decisions (the BBC micro is very good at pretty coloured drawings).

Then the provisional tape recorder

broke down, and we didn't have one that was instantly compatible to hand. It was probably the best thing that could have happened: we had to get to grips with the machine ourselves. And even at out two-steps-in stage, we got quite a lot out of it.

A program that printed out any times table - written simply because it was a manageable programming task for an absolute beginner - accidentally demonstrated the machine's potential for investigating number patterns. It was much more fun looking for patterns in tables if you could start with an instant print-out of the 3,569,699 or the 5,555 times table.

All the children enjoyed making the machine draw, and plot coloured triangles - and most got the necessary feel for handling co-ordinates pretty quickly. They loved basic computerised mental arithmetic tests and geography quizzes - both of which turned out surprisingly easy to

write, with the NEC course and the provisional *User Guide* at our elbow.

The half dozen children who began to get the hang of writing this kind of program themselves incidentally had to learn mathematical ideas about variables and randomness.

They also had to learn to be extra careful about punctuation marks and spelling, or their programs didn't run. Debugging programs took some hard logical thinking.

One unexpected benefit was the social effects of the machine. The most computer-minded were happy to take on the initiation of novices, and the computer turned out to be a good medium for integrating children from the special units with the rest.

It was less easy to make sure that the seven girls in the class had their fair share of the action. They were keen, but not prepared to elbow their way to the keyboard, and seize control after school. It took adult intervention to get them their turns.



A group of children from Belmont School

Mrs Forzia Siddiki, who teaches English as a second language, was delighted with the project. The non-English speakers in the class had got a lot of new language out of it, because they'd been so interested.

The BBC television programmes were an essential part of the project, helping to put the classroom machine into the context of computer uses in the real world. But there was no doubt that the computer in the classroom sharpened the children's interest in the programmes.

The *Computer Book*, though not written for children of this age, provided an excellent crystallisation and explanation of some of the things the children were learning through the television series and the machine.

The children were delighted with the whole project: "It's interesting," "We'll need to know about computers for jobs, in offices and that," "It makes you think, getting it to do what you want." Mr. John Dewhurst, the head, believes that so far the project has been very worthwhile.

A morning with five and six year olds in the infants also generated a lot of excited enthusiasm from the children, and interest from the infant teachers. Here, the BBC computer's built-in option of lower case text came into its own.

"They're going to have to live with computers - it must be right to introduce them early on," said Mrs. Ann Tann, the class teacher.

Two of three of the infants rapidly picked up the mechanical operations of the keyboard, and could help the others. (My own six year old, with plenty of time to play with the machine at home, soon had it under control, listing, loading and running programs and using the copy editor to get the bugs out of programs.)

So far, all we have done at Belmont is see the potential of a one off "computer project", using the BBC programmes and resources, and borrowing a machine to bring the work to life. The next stage will be to collect some professional primary software (the BBC is producing a package in April) and explore the machine's possibilities in regular

primary work.

Any computer would have done for the project. But the BBC machine has some particular advantages for primary schools. For the basic price, you get the music capability and excellent colour and graphics. You also get the option of lower case text. The screen editor is wonderfully simple - a great boon for tyro programmers.

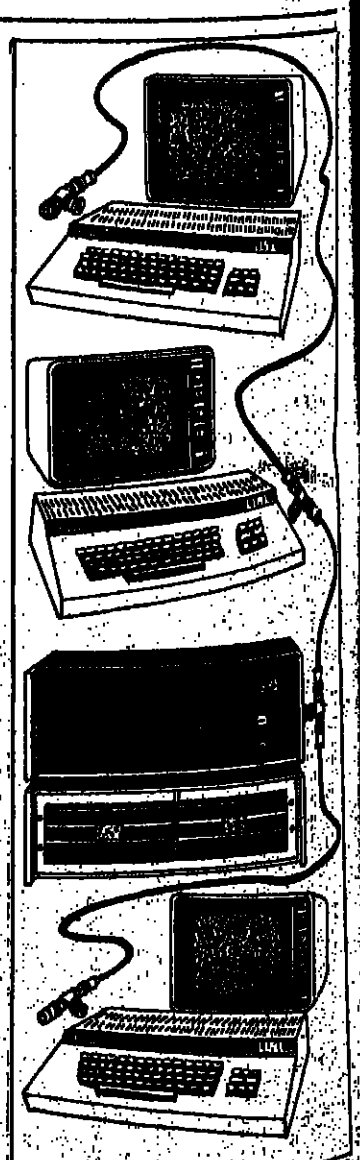
The keyboard feels less solid and clunky than other popular machines in primaries - Apples, Tandys and Pits. It is very sensitive - letters repeat easily, and beginners typing run end up with RRRRRUUUUUU. But the children rapidly adjusted to their touch, and so far the keyboard has stood up well to random beating from infants and toddlers.

The BBC network of resources seems a great success. The NEC course covers Basic very clearly, and a follow-up course is planned for enthusiasts. (The book has already sold 25,000 copies, with another 20,000 on order.)

It comes in two versions, one is tended for Sinclair owners, the other covering all other machines, with some special guidance for the BBC micro. It does not introduce the special "structured" features of BBC Basic, which was devoted for programming than older disks allow. (For example, you can repeat... Until, and define self-contained procedures and functions that can be called in programs.)

But the final version of the *User Guide* (which comes in with the machine) should be fine on those features. If the provision guide is anything to go by. The author, John Coll, has managed to combine understandable descriptions for laymen with technical data for experts, and there will be a chapter of demonstration programs.

The BBC Microcomputer, Model A (16K) £299, Model B (32K) £349. Enquiries and orders to BBC Microcomputer System, 14 Station Road, Keighley, Northants, NN15 7BE. 30 Hours Basic by Clive Phipps, National Extension College, 15, St. The Computer Book, Ed. by Don Allen, BBC Publications, 15.75.



Microcomputers on a chain

Paul McGee reviews two computer network systems

The level of computer sophistication in schools is rising so rapidly that schools are no longer discussing which computer or how many to have, but are trying to decide which type of computer network to work towards over the next few years. Schools, like commercial and industrial computer users before them, are discovering that buying the newest, cheapest, brightest and most easily available device can lead to long term problems. This review looks at two obvious contenders for school networks.

The two networks to be considered are the Research Machines Chain and the Acorn Econet. They are the likely contenders in view of the Department of Industry's backing for the Research Machines Chain. The Research Machines Chain is a dual floppy disc Research Machines 3802 or 130 (towards a BBC Model A Microcomputer from Acorn). The BBC Microcomputer has only cassette storage at present although discs are planned. A brief restatement of the relative advantages of discs and cassettes will help to clarify situations in which a network would be desirable.

The advantages of cassette systems are that they:

- are cheap to purchase and maintain
- are easy to operate
- have a robust medium
- There are two kinds of discs, floppy discs and hard discs (also called Winchester discs). Floppy discs are small, flexible and easily damaged. They contain about 70-125 K bytes and

side if they are single density. Hard discs are usually contained in a sealed container and rotate faster and transfer data faster and store Mbytes rather than Kbytes of data. They need a floppy disc as a back-up device to enter for disc failure and transfer data to and from the hard disc. Discs are either 5.25-inch or 8-inch.

In comparison with cassette systems, disc systems:

- are expensive to produce and need regular maintenance and a cleaner working environment
- are usually sophisticated and a novice user would find them harder to use
- offer much greater facilities for storing and retrieving information in a reasonable time
- use floppy discs which are easily damaged by bending, twisting or even scratching by the disc head

Schools often start with cassette-based systems and then upgrade to disc when they can afford it. A long-term aim must be that as many users as possible should have the benefits of a disc system as cheaply as possible. The economics of 5.25-inch floppy discs mean that it might be better to buy many single drive disc rather than pursue a network policy, but the advent of 5.25-inch Winchester discs will make the case for buying a network much stronger.

The popular picture of a microcomputer includes a keyboard and screen, but for many uses in schools a printer is needed. Popular dot-matrix printers currently cost about £400 and are capable of producing character output as well as low and high resolution graphics.

Ideally, each user should have access to expensive peripherals without needing to have them connected directly to the individual computer. Networks for school use should do this without incurring high overheads.

Schools which have had unsatisfactory experience with time-share systems connected to a local college or the Council's computer should note certain important differences between time-sharing and a network system. In a time-sharing system the central processor is shared as well as the peripherals. In a network each station has its own processing power and shares only the peripherals.

In both systems several users will access the same disc. As with time-sharing systems, what will determine the quality of the system is the reliability of the networks and time-sharing both suffer a loss of processing power which has to be devoted to managing the system.

Another similarity is that both systems need some form of security and data management. A school system which has CAL packages, pupil programs and school administration files must ensure that only the relevant user can access any particular file or record. Some files also need to be read only, ie they can be read but not altered.

Decisions have to be made about what data will be available on the system at which times. Free-standing systems do not have these problems

because each user brings the necessary discs or cassettes and takes them away at the end of the session.

Large operating systems also remove some of a user's independence. In practice, not many schools alter the small operating system provided with their microcomputer, but hardly any would have the time or knowledge to alter a network operating system. This means that the facilities provided by the manufacturer must meet the user's needs.

An operating system to meet all needs would be enormously unwieldy and it may be better to have separate operating systems for specified uses. The user should not have to understand the details of the operating system to use it satisfactorily.

Given a fixed sum of money a secondary school would be faced with the following options: to buy many cassette systems, or a smaller number of disc systems, or a mixture of cassette and disc systems, or a network. Probable uses can be classified as Computer Studies, CAL, administration and control applications.

Computer Studies would include writing programs and using packages. Cassette systems, particularly those having the language translator (eg the BASIC interpreter) in ROM, satisfactorily allow individual pupils to write programs and several cassette machines would be a better bargain than an expensive disc system. If Computer Studies pupils are to be given access to a variety of useful packages, discs are essential.

Many CAL packages do not make

continued on page 41

Conversion exercises

Mary Hope looks at the potential for IT in special education

It is unlikely that many special education teachers ever thought that Information Technology Year would make a great difference to their life. But even a brief look at IT shows that potentially it has direct relevance to them, though whether we will be able to convert it into reality is still somewhat in question.

Perhaps the simplest definition of Information Technology Year is "the changes in the storage, transmission and transformation of information made possible by the new technology". If we start to consider children with special needs it is apparent that a common problem is in the area of information handling. Blind students can handle tactile or aural information, but not visual; deaf students speech must be converted; and children with learning difficulties have difficulty processing information.

For a blind student a device such as the Optacon, (a small, hand-held camera connected to a microprocessor which converts the visual image to a tactile display picked up by the user's index finger resting on an array of movable pins), converts the information into a form that he or she can handle. Particularly relevant to the visually handicapped is conversion of visual output of a microcomputer into speech.

Work in this field is being carried out by Dr Tom Vincent at the Manchester Open University Regional Office with the support of the Microelectronics Education Programme and the Department of Industry. Speech output will be available to blind pupils when they are using a microcomputer to either write programs or to run CAL programs. The same approach will also be used to help young children or the newly blind to learn.

For the physically handicapped person with enough manual control the need is for a typed input to be converted to speech which, as far as possible, resembles that of able-bodied people, eg it should have intonation and the right pitch for the sex of the person. Even greater problems are faced by those physically handicapped children and adults who lack the coordination to type.

The "POSSUM" typewriter used by the very handicapped has a matrix of letters displayed on a screen, behind which is a moving light. The child, who can only control a single switch, presses it once to indicate the row in which the desired letter is placed, a second time to choose the column and a third time to print out the letter on an attached typewriter.

This method of communication is obviously slow, and among its other drawbacks are: it precludes setting out arithmetic problems so that the user can calculate first, then the text and it does not allow the child to draw or doodle.

Communication aids based on standard microcomputers can run programs that enable children who can only cope with a single switch to draw, to do arithmetic work in the conventional way, to use word processing facilities so that sometimes, for the first time in their life, they are able to produce error free text. Using the storage facility of the microcomputer the user may also be able to build up a personal lexicon.

Another handicap group that is starting to gain from information technology is the deaf and partially hearing. The two main difficulties for these children are learning the syntax and vocabulary of language, and speech production. A system devised by Dr Frank Fallside at Cambridge University, currently running on a computer, is bigger than many found in our secondary schools, enables the user to choose various parameters of speech. The deaf person speaks into the microphone and a visual representation is given.

Given the deaf and partially hearing vocabulary practice with a micro is relatively straightforward, teaching syntax is a much more difficult task. Cambridge's approach is based on the work of Professor David

Crystal at Reading University. This involves diagnosing the child's level of speech and giving appropriate opportunities for practice. This work is still in its early stages.

The power of IT to transmit information more efficiently has not yet really impinged on the world of special education. It may be telesoftware (ie the transfer of computer programs from one computer to another by either a telephone line or a videotape system or broadcast on a teletext one) that will change this. CET is currently exploring the feasibility of telesoftware in secondary education, and considering including some remedial programs for the library to be held on Prestel.

Teachers are currently using micros in special education schools to consolidate learning (it used to be known as "drill and practice"), but there is a growing feeling that this is not the only application for slow learners. It could be used to teach children how to learn.

Information retrieval skills or thinking skills might be developed by using simple, but strong, program-

ming languages such as "Logo" devised by Seymour Papert at the Massachusetts Institute of Technology in the States. The lack of data files in the first case, and a programming language that runs on the commonly available micros in the second has so far precluded any assessment of this approach by teachers in special education.

Even this brief overview indicates the potential of IT to alleviate some of the educational disadvantages of children who are mentally, physically or sensorially handicapped. Bearing in mind that we have certainly not fully exploited the possibilities, there is every cause to be optimistic, if, (and this is the all important question), we can find the resources to convert the potential into reality.

Under the MEP, two part-time consultants (Phil Odor, from Edinburgh University and Patrick Poon from Kings College, London) are available to schools with physically handicapped pupils to give advice and help; curriculum development work is being funded; one week teacher training courses are being

Apple-still the best and now better value than ever

Apple leads the field in educational computing. And the evidence is the 100,000 Apple education systems in use throughout the world. Apples are being used at every educational level - from primary schools right through to Universities and industrial training establishments. Everywhere, in fact, that professional educationalists won't accept second best.

THE BEST - WHATEVER YOU TEACH

The reasons for this aren't hard to see. Apple has so many advantages in terms of versatility that over 200 software packages are available for Apple in the UK alone - covering computer-assisted learning in all kinds of fields - business studies, remedial training, as well as computer studies and school administration. (You'll find all the information in our booklet - "Apple Across the Curriculum.")

And with capabilities for networking and real-time machine or process control, it's really no wonder that so many schools have realised that an Apple system can grow with them as they find more and more ways that Apple can help teachers become more effective and learning become more exciting.

THE BEST SOFTWARE

Of course, Apple has always had the lead in software - simply because Apple have set the standard in educational hardware.

Right now, you can take advantage of a very special offer. With every order for Apple equipment by a primary or secondary educational establishment, we'll donate up to £48.00 of software. For primary schools, you can make your choice of three software packages from the range of nine programs developed by the Cambridge Software House. For Secondary Schools you can again choose three programs - this time from a selection of five programs developed by Five Ways Software and published by Heinemann Computers in Education.

Simply return the coupon for more details and you'll receive your special offer voucher.

BETTER VALUE THAN EVER BEFORE

On top of that, we've introduced a scheme whereby computing with Apple no longer need be expensive. Quite simply, to help every school make giant strides into Information Technology Year we've reduced the price of Apple systems by 20%. Which means that you can now start computing with an Apple disk-based system for well under £1000!

And when you're considering value for money, think about the extras that come as standard with an Apple system. Things like the reliability of Apple products, which we back with a one-year warranty. And then there's our Extended Warranty which, for £105.00, ensures that you will have no unforeseen costs over the first two years that you are using your Apple system.

For full details of our 20% price reduction (open to all educational establishments) and the free software (open to primary and secondary schools), simply send back the coupon.

At a time when everyone is having to reduce spending, this is our helping hand. Don't compromise. Insist on the best. And the best is Apple.

Apple Computer (UK) Limited
Finway Road, Hemel Hempstead, Herts. HP2 7PS
Tel: Hemel Hempstead (0442) 48151
24 hour answering service. Telex: 825834 APPLUK G
*Apple is a trademark of Apple Computer Inc.
Prices exclusive of VAT and correct at time of going to press. The offer applies to all purchases of 48K Apple II systems purchased by recognised educational establishments.
Please complete this coupon and return it to Apple Computer (UK) Limited, Finway Road, Hemel Hempstead, Herts. HP2 4BR FREEPOST.



the personal computer

Name _____
Title _____
Address _____
Type of educational establishment _____ JES 3/2/82



ICL CES Computer education in schools

GET THE BEST FROM COMPUTER STUDIES

CES is the major curriculum development project in the field of computer studies and can provide you with:

- ★ Students' Books
- ★ Teachers' Guides
- ★ Further Questions & Worksheets
- ★ Revision Questions
- ★ Display Packs & Wall Posters
- ★ OHP Transparencies
- ★ Programming Aids

Send for full details of CES books and materials for Computer Studies:
ICL-CES, 80 Portman Road, Reading RG3 1NR.

Name.....
School/College.....
Address.....

Or call David Roberts on 0734-595711, extension 274.

RESEARCH MACHINES MICROCOMPUTER SYSTEMS

Versatile, professional microcomputer systems for educational, scientific, and research applications.

3802 — Chosen for the Dol 'Micros in Schools' scheme; recommended by the CCEA for use in government departments; and endorsed by thousands of demanding users.

4802 — The powerful new system for networking applications which also offers high performance at low cost as a cassette-based entry-level system.

High reliability 280A/CPM systems in a range of configurations to match well-defined needs... exceptional high resolution colour graphics... screen handling versatility... mature software... specialist interface options. Contact the Sales Office for details.

RESEARCH MACHINES LTD
Mill Street, Oxford OX2 0BW. Tel: (0865) 49866

HAVING A MICRO MEANS NEEDING A PRINTER

NORTHAMBER Ltd are major distributors of printers, monitors and VDUs to education. We can supply all your peripheral requirements at unbeatable prices (ex stock/next day delivery).

If you would like to talk to a supplier who understands your problems - who knows the products you want - within the limitations of your budget - and who can provide an excellent after-sales service, then ask for full details at your local MEP office or call us direct on Esher (0372) 62071/66386.

NORTHAMBER LIMITED
3/4 Dawes Court
Esher, Surrey

extra Active viewing

Barry Fox argues that the real future for video as an educational aid is in interactive programming and viewing

During the last year or so it has dawned on publishers that the books of the future won't be like the books of today. Although we will still read novels on the beach or on the way to work, we'll often be learning from a TV screen.

At first this seems a ludicrous idea. Why should anyone want to read text, or study pictures, awkwardly displayed in relatively low definition on a cathode ray tube? The answer is simple: what is displayed on the TV tube in the future will bear little relationship to what is now printed on the page of a book.

"Linear", "active" and "interactive" are essential words. A film or broadcast TV programme watched from beginning to end, is a "linear" programme. The viewer plays an entirely passive role. If the programme is on videotape or videodisc, the viewer may be able to stop the programme and display a still frame, run the programme backwards to see a chosen part over and over again, or fast search forwards to skip unwanted sections. This can be described as "active" viewing, because the viewer is at least partly in control of what appears on the screen.

The real future for video as an educational aid, and as a wholly new entertainment medium, is in interactive programming and viewing. The programme presents the viewer with choices and options which must be answered. There is automatic display of still frames, and the viewer searches out sections of the programme.

Ideally, a computer is linked to the display system (usually controlled by digital data stored alongside the picture and sound information) so that interaction between the programme and the viewer is controlled by an unseen "intelligence" according to a pre-programmed pattern.

For example, the viewer might be presented with a question and asked to key the answer into a control pad. The computer will search out and display fresh or repeated sections of the prerecorded programme which follow logically from the viewer's keyed response. In this way, correct answers in a quiz-style programme can trigger the display of fresh questions while incorrect answers can trigger a repeat display of the question, perhaps with a clue. Further errors cause the correct answer to be displayed, complete with background explanation and appropriate comments on whatever wrong choices were made.

An interactive story will offer the viewer a choice of plot progression. Do you go upstairs in the haunted house or down to the cellar? Do you open the box or leave it alone? The video programme is "branched" (another new word) and the viewer either chooses the branches or has them thrust on him by computer in response to other decisions.

Programs by telephone and tv

Mike Aston on telesoftware

The term "telesoftware" was coined as long ago as 1977 by an Englishman, Bill Overington, in a technical paper presented at an international conference. He described a system for broadcasting computer programs over television channels to specially adapted teletext terminals. In the intervening years, the term has widened its meaning to describe the transmission of computer programs and data from a mainframe (large) computer to a micro (small) computer either via broadcast television signals or the telephone system.

To understand the ways in which this can be achieved, we must first consider the two kinds of carrier available in the United Kingdom. A set of jargon words have grown up around the concept of electronic delivery systems. Videotext, without a final 't' is the internationally accepted generic term for any system capable of remotely displaying text on a television set.

If the information is broadcast from a TV transmitter, the system is called teletext, if transmitted along a telephone line, it is termed a viewdata system. This term itself has become rather obscure as we now talk about in-house viewdata systems, but essentially what we mean is a page by page display which is conceptually structured in an inverted tree rather like the library Dewey system.

Within these two main types, we find a variety of brand names such as Celestex (BBC), Oracle (ITV) and Prestel (British Telecom). The latter has the distinction of being the world's first public viewdata service, currently with over 15,500 registered users - 274 of which are in educational institutions.

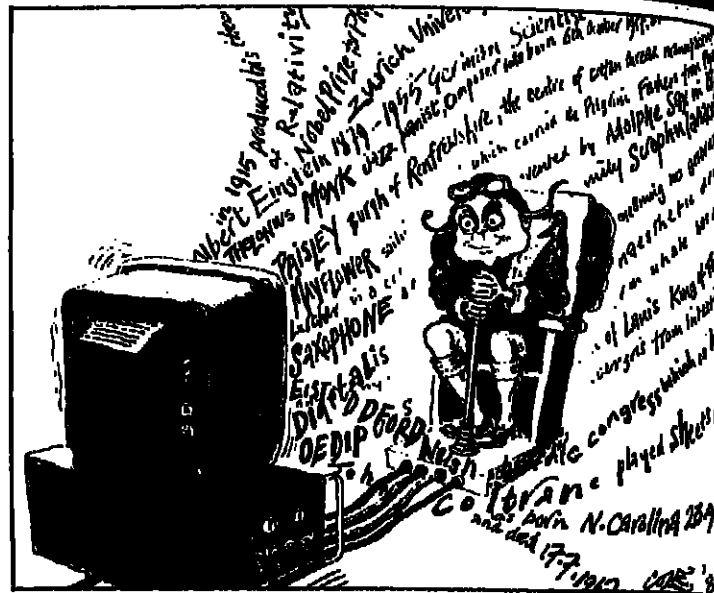
Many countries are developing videotext systems, a great number of which are compatible with UK Prestel. Ordinary television sets can be modified to receive either teletext or viewdata or both. Teletext is received via the normal TV aerial and viewdata via a simple link between the telephone and the television set. Users press buttons on a simple numeric keypad. To use the more advanced features of both systems, the user needs to have a full alphanumeric keyboard, similar to that of a typewriter.

Teletext is broadcast via normal television programmes or test cards and can be detected on a badly tuned set in the top four lines of the picture as a series of jumbled blobs. When decoded these generate the letters, numbers and graphics which go to make up a page or frame of information. The total number of pages being broadcast at any one time on all three channels is in the region of 600. There is always a time delay, even if very short, while the user waits for a particular page to be broadcast, captured and displayed.

Teletext telesoftware has been confined so far to a project based at Brighton Polytechnic and nine secondary schools in different parts of the country. The telesoftware 'teletext' colour TV and teletext decoder which has been interlaced to a microcomputer system, based on the 280 chip.

It has 32K bytes of RAM with a powerful 24K extended BASIC interpreter available in ROM. The colour graphics has a resolution of 240 x 240 and a mini-cassette drive provides program and data storage under full software control. Computer aided learning from a variety of sources, converted by a programming team at Brighton Polytechnic, is made available to the BBC and can be broadcast as a series of Oracle or Prestel pages.

Programs can be stored on cassettes and used by pupils and teachers at any time in the classroom. It will soon be possible to adapt the BBC Acorn microcomputer to receive broadcast teletext and it is intended that a number of Schools TV programmes will be



continued from previous page

are endless, and even people who are in the video business have only just begun to scratch the surface. The Massachusetts Institute of Technology at Cambridge, Massachusetts, has led the field with some extraordinary interactive programmes. Although it is an open secret that most of the funding for MIT's work has come from the military (for instance to provide the US army, navy and air force with training programmes and battle information displays) the Institute's work has the potential for virtually infinite peaceful spin-off.

One MIT interactive video programme uses two videodisc players linked to a computer. On a screen there is a choice of American towns. One of these is chosen by keying simple commands into computer, and the disc programme is automatically searched for an aerial view of the selected town.

While this is being displayed from one disc, the other disc searches for a film sequence of a car ride down the streets. As the operator turns left or right as if steering the car, a computer searches for different sequences showing different routes. When the "driver" stops at the door of a house, a close-up of the house appears on screen. There is further action through the door.

MIT has also built the extraordinary room of the future, called Data Land. The viewer, or more accurately the subject, sits in a chair in front of a large screen. The total range of information available is displayed on this large screen by logo or title like a bookshelf.

With a joy stick control, the subject aims over the screen and zooms in on a chosen area of information, just as we scan through a bookshelf and pull out a chosen volume. The computer, under the control of the joystick, extracts ever more detailed information from the chosen source.

Discs hold the material which is displayed on smaller monitor screens. It will be many years before MIT's work is available at domestic level, but already publishing houses, and firms in the business of video programming, are building up a stockpile of interactive video material.

continued from previous page

Each of the systems have advantages and disadvantages for the educational user - and the software provider. Teletext has no accounting facility - which makes it virtually free to the user but offers no reward to the provider. It is not interactive and, unlike Prestel, documentation cannot be requested. Capacity is limited and browsing is clumsy and time consuming.

Prestel is more expensive to use, but a considerable choice of information and software is available. Messages can be sent by the user back to the provider, or indeed, from user to user. Because the system is random access, there is no delay when requesting a particular page of software other than that of transmission time. Both systems have one major advantage over most other dissemination methods in that only one copy of the central software library has to be maintained.

The story of telesoftware is not yet ended, in fact, it has probably only just started. During 1982, Prestel intends to launch its Gateway service. This allows a third-party host computer to link up to the Prestel computer network via the British Telecom ESS.

This will enable users to access a micro-library via Prestel at local telephone rates thus bypassing the problem of bulk storage on the Prestel computers, which is costly to the provider. This system can also make available large datafiles, for interrogation via a common user interface - namely the Prestel menu system. Satellite telesoftware cannot be far away and the prospect for delivering learning materials or any computer software where and when you want it - in the school, office or home - is very bright indeed.

Mike Aston is the National Co-ordinator (Computer Based Learning) for the Microelectronics Education Programme and Deputy Director at the Advisory Unit for Computer Based Education, at Hatfield.

Full scale active programming of the type mentioned above depends on the widespread availability of videodisc players. Although it is possible to run active and interactive programmes on videotape players, the disc is the ideal medium. The tracking head of a disc player can search out selected sequences from up to an hour's playing time (one side of a disc) within a few seconds. This search is accurate to a fraction of a second, or to a single picture frame.

It has always been supposed that the Philips Laservision disc system (due for launch in the UK sometime this year) is the ideal choice for interactive programming. Because a laser reads the disc information there is no physical contact between the tracking head and disc surface. This means there is no wear on the disc.

But the VHD system, developed by JVC of Japan and backed by Thorn-EMI, has been under development and can now offer virtually everything that Laservision has. Some of the technical disadvantages of the system have been cleverly turned to advantage by JVC. Also, Thorn-EMI has invested heavily in the production of active programmes to support VHD.

On the other hand Philips has concentrated mainly on the production of players and of discs pressed from programmes produced by anyone who cares to offer them for pressing. Only a few of these have been interactive and Philips has recognised, rather late in the day, that the commercial success of Laservision may well depend on a healthy supply of non-linear programmes.

No-one knows which system will prevail in the market place, Laservision or VHD. The existence of two comparably good systems means a split standard, public confusion and a commercial battle. Also, Philips has yet to prove that it is capable of pressing reliable optical discs in bulk. Discs hold the material which is displayed on smaller monitor screens. It will be many years before MIT's work is available at domestic level, but already publishing houses, and firms in the business of video programming, are building up a stockpile of interactive video material.

extra CEDAR's way out of the wood

The arrival of microcomputers in classrooms and Christmas stockings has brought with it an explosion of questions about educational computing. The answers are not always easy to find.

CEDAR (Computers in Education As Resource) is one of the information services which attempts to provide some of the answers. We provide information on the use of computers in teaching every subject in the school curriculum - from home economics to A level statistics. We do not offer much information on hardware, or on computer studies, or even on sources of funding for the purchase of computers. But, we do provide information on Computer Assisted Learning (CAL) for schools as disparate as infants and special schools, and sixth form colleges. We also advise universities and industrial training establishments.

Our information is stored on two databases. The first has bibliographical references which date back to the National Development Programme in Computer Assisted Learning (1973-77), as well as references extracted from journals published as recently as last autumn. It is updated every six months.

The bibliography covers all sectors of education and includes references

to conference papers, unpublished research papers, journals and books. It is held on-line on the Imperial College computer and can be searched using a simple program. The results of a search can be made available in print form and the whole bibliography is published with a KWIC index in microfiche.

Many of the items included in the bibliography are in the library which is open to the public for reference, and books can be borrowed through library interloan. Copyright permitting, copies are made of documents and sent to answer enquiries.

The second database is the CAL Package Index, a catalogue of computer assisted learning packages available in the U.K. Most are for university level studies but there are details of more than 250 programs suitable for primary and secondary schools. This database can also be searched, and subject printouts and a microfiche copy of the whole catalogue are available.

Cedar publishes a free newsletter, CALNews, at the beginning of each school term. It contains short articles on new developments in CAL, notices of conferences, workshops and courses, and letters from teachers who are initiating new projects or are interested in making new

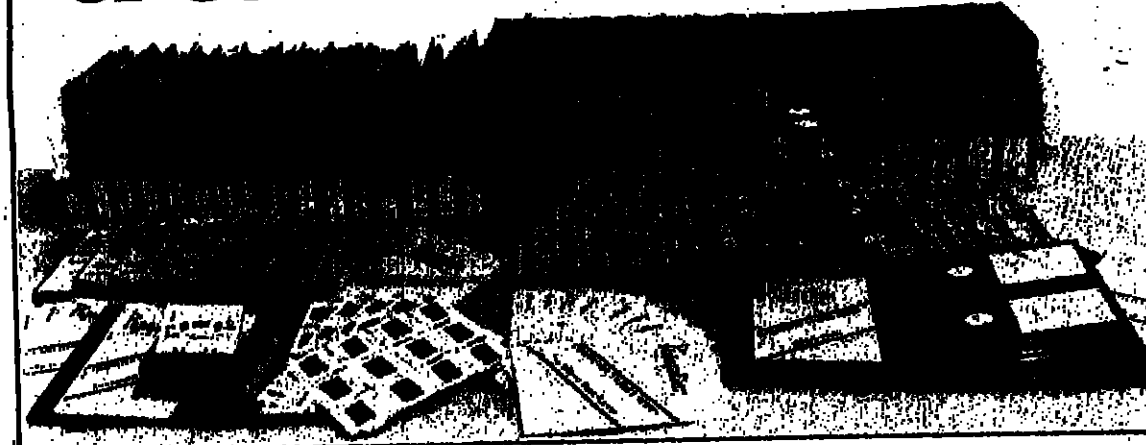
contacts. Addresses of the authors of articles are always published so that readers can follow up interesting ideas. A personal contact is often the most valuable information for a teacher using a computer. In addition to developing links with MUSE (Microcomputer Users in Education) and MEP (Microelectronics Education Programme) and some I.e.s.s. Cedar has accumulated an old fashioned card index record of contacts. Finally, Cedar is involved in a programme of workshops and seminars on CAL.

To conclude: we are based at a university, and provide information for universities and training establishments as well as schools. But we try to be aware of the different information needs of these groups. Teachers need relevant, accessible information, and reference to an expensive book is often less useful than the news that a teacher in the area has a similar micro, and a similar class - and a program which suits both.

For further information about the work of Cedar, or Computer Assisted Learning, contact: Nicky Rushby or Judith Morris, CEDAR, Imperial College Computer Centre, Exhibition Road, London SW7 2BX. Telephone 01-589 5111.

Judith Morris

THE AUDIO VISUAL LIBRARY OF COMPUTER EDUCATION



At last! A comprehensive audio visual series on Computer Science at prices you can afford. This brand new set of 15 Tape/Slides (or Tape/Filmstrips) provides a structured introduction to the world of computers, exploring all aspects of the subject from micro to mainframes. The presentations are suitable for school, college and university students, and can form a solid framework for examination study or an appreciation course.

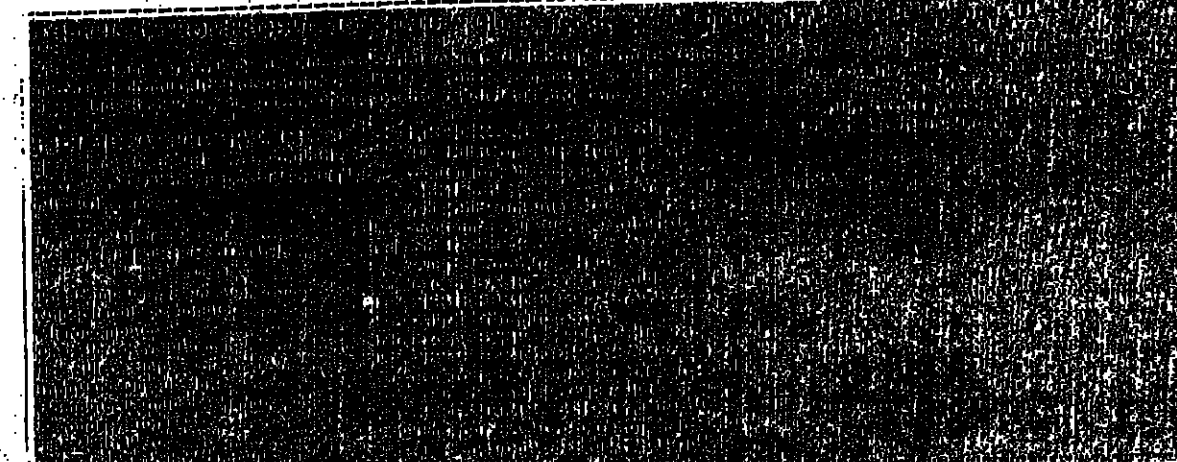
THE COMPUTER: introduces computers, describing how they work and their importance in modern society.
UNDERSTANDING COMPUTERS: clarifies some common misconceptions about computers by exploring both their capabilities and their limitations.
MICROCOMPUTERS: describes the appearance, structure and operation of microcomputers and peripheral equipment.
THE MICRO REVOLUTION: explains in simple terms why silicon chips have become so important and how they are used.
THE SILICON CHIP: provides a clear explanation of the development, appearance and construction of integrated circuits.

INPUT AND OUTPUT UNITS: discusses the appearance, operation and applications of typical input and output units.
COMPUTER TERMINALS: explores the characteristics of on-line systems in terms of both hardware and software.
SECONDARY STORAGE: compares the features of the magnetic storage media, tape, drum and disk.
THE CENTRAL PROCESSOR: describes in simple terms the physical structure of a central processor and the functions it fulfills in a computer's operation.
COMPUTER NUMBERS: discusses number systems and the storage and transmission of information inside a computer.

INTRODUCTION TO PROGRAMMING: explains the function of computer programs and languages, and presents the four stages of planning, coding, testing and documentation.
BASIC 1, 2, 3 & 4: an introductory four-part course which concentrates on the most important instructions for the newcomer to programming, and includes only those statements compatible with most versions of BASIC. Resilient examples encourage students to write their own programs, and emphasis is laid on clear coding. The topics covered include input/output statements, branching, functions, subroutines and arrays.

With 900 slides, nearly seven hours of taped commentaries and 15 extensive printed guides - all library packaged in special storage binders - this is the best course anywhere for quality, up-to-date content and above all value. BUT JUDGE FOR YOURSELF. Just complete below to preview our series on our 30-day free approval offer.

CUT HERE



School Software Competition

PRIME PROGRAMS
£1750 to be won

If you're a teacher writing computer programs for classroom use, enter them for the Prime Programs School Software Competition. You could win one of 12 prizes (£1750 in all to be won) and winners get guaranteed publication, plus royalties. Programs for any subject, any level from primary to A-level, and for almost any machine are eligible.

Send Now for a poster and entry form with full details.

Prime Programs is sponsored jointly by Hutchinson Education and Transam Computers Ltd.

To: Janis Nicholas, Prime Programs, 17-21 Conway Street, London W1P 6JD.

Please send me a poster and entry form for the Prime Programs School Software Competition

Name _____ School _____
Address _____

TES 1

Longman Micro Software

including

COMPUTERS IN THE CURRICULUM Schools Council Project

A range of fully documented and tested educational software for many subjects - Biology, Chemistry, Physics, Economics, Geography, Maths etc. etc.

Write now for a brochure and official order form to:

Duncan Beal,
Longman Micro Software,
Longman Group Resources Unit,
33-35 Tanner Row,
York (Ref TES)

ILLUSTRATING BASIC

Donald Alcock

A new school edition of this outstandingly successful book for students meeting the computer for the first time. It presents the computer programming language BASIC in a lively and interesting way that is very suitable for beginners. The book has been hand written by the author and contains a large number of figures and diagrams.

- The original edition has sold over 100,000 copies.
- Recommended by *Which?* magazine.

Inspection copies for teachers are available upon application.

CAMBRIDGE UNIVERSITY PRESS
The Edinburgh Building, Shaftesbury Road, Cambridge CB2 2RU, England

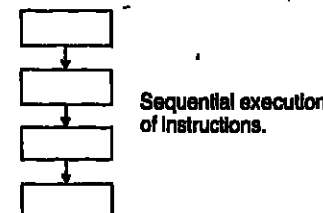
extra Language difficulties

Roy Atherton on the proliferation of computing languages

In the late 1930s Alan Turing devised a theoretical computer which was very simple. It had essentially three types of operation and the rules for programming it could be learned in half an hour. On the other hand, writing programs for it required great ingenuity. Users had to write programs in the machine's own exceedingly un-human language.

Nowadays it is possible to communicate with computers at different levels. Stanley Kubrick's *Space Odyssey 2001* goes further and postulates the highest possible level - natural human language which the HAL 9000 computers speak with.

In this context a program would be a sequence of patterns stored in successive memory locations. In the simplest case the patterns would be interpreted and executed, in sequence, by the computer. We might think of them as made up of zeros and ones. An information handling system working only in zeros and ones might seem restricted but this is not so. With appropriate coding, all human knowledge and most of its culture can be encoded as sequences of zeros and ones.



There might be several hundred possible operations doing such things as comparing, adding and other, more esoteric manipulations. In what we might call the machine age, programmers had to understand these machine-level operations.

The first step forward along the road to HAL enabled the programmer to write such things as:

COMP LETTER
meaning compare the code in one place with the code in another place to see if they are the same. But first a translator program, called an assembler, would turn the instruction, **COMP LETTER**, into the correct internal machine patterns.

There was steady progress and by about the end of the 1950s we enter what might be called the age of primitive user-oriented languages.

FORTAN (Formula Translation) appeared and enabled programmers to use instructions which related more obviously to their problems rather than machine operations. **COBOL** (Common Business Oriented Language) came at about the same time. Why two languages?

A computer language is a vocabulary or words (keywords) and rules of grammar for making instructions. The more keywords there are and the more sophisticated the grammar, the bigger will be the translator program. It will need a bigger computer and programs will take longer to translate. A computer language should be carefully designed to meet particular criteria with reasonable economy. It may be strong in facilities for data processing or it may emphasise engineering, software writing, simulation, computer aided design or other specialist requirements. It cannot do everything.

Typically in the 1960s a program would be punched on cards or paper

tape and perhaps transferred to magnetic tape or other type of storage medium. The user might wait hours or days to get his results and he would have to understand "job control" instructions in order to guide his program properly through a series of processes. All this would be controlled by special programs known collectively as an operating system. Ideally an operating system should relieve the human operator of as many routine tasks as possible.

The other major consumer of time and effort is the process of editing. Programs do not instantly do what is required. They may have bugs and they need to be developed or updated as circumstances change. Early editors were the forerunners of modern word processing but they were much less helpful and the user had to work hard to get his desired changes. They are much better now. An editor should help the user to alter his program in any way he chooses with minimum possible effort.

Operating systems, editors and other miscellaneous system software are collectively known as the operating environment and the designers of Basic wanted to make things simple and around 1965 they realised Basic (Beginner's All-purpose Symbolic Instruction Code). The vocabulary was short, the syntax was simple and the notation was clear.

The authors also built operating and editing features into the language and cut the waiting time for results from days or hours to minutes or seconds.

The syntax of Basic and the mechanics of its use are simple but that is not the end of the story. To understand why Basic, despite its virtues has been described as "an educational and intellectual disaster" (John Laski, T.E.S. November 1981) we must examine more closely the real nature of computer programming.

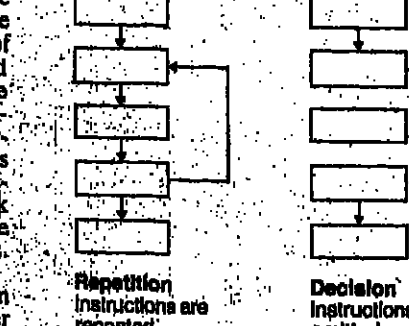
Problem-solving concepts
A machine which does a million processes a second cannot be programmed for every operation. Just as a foreman might say "Dig twenty foot holes" a programmer must build repetition into his programs. Decision making within a program is also necessary so that work can continue uninterrupted, and the problem of complexity is tackled by breaking a job into sub-jobs called procedures or subroutines.

At the machine-level repetition, decisions, and modularity are handled by breaking the natural sequential operations (see diagram below). Modern computer language makes it easier to handle these ideas by recognising such words as **REPEAT**... **UNTIL**, **IF**... **THEN**... **ELSE** and allowing the programmer to deal with sub-jobs separately as named procedures. But of the half-dozen or so such structures Basic only has two or three. Programmers have to make up the deficiencies with the machine-oriented concept which says in effect

NOTO (another program line) Not only does the use of this instruction often lead to tangled programs which are difficult to understand, but essential concepts of problem analysis (repetition, decisions, modularity) may not be properly acquired. An apt phrase, structured programming, has been coined to describe methods which are systematic, tend to produce good (readable) programs and encourage the acquisition of problem solving skills.

Structured programming

An educationally significant advantage



ance was made in 1975 when Roy Christensen, worried about the effects of Basic, defined some things but powerful extensions and the result COMAL. COMAL is now running on Apples, PETs, Planets, Comets and Clements.

Other structured Basic-like appeared and amongst those like Comal, have the successful ones (ANSI BASIC), Open University Basic, Waterloo Basic, SAS (380Z) and a version from Dartmouth College, where Basic was born sixteen years ago. Thus Basic has joined other languages in the march towards structure.

A curious and sad omission from the list is BBC Basic which has two steps towards being a proper structured language but has a serious omission in repetition handling which makes no real progress in the handling of decisions. Presentation of programs is also unsatisfactory in the general approaches to documentation and course notes (National Extension College is an exception with BBC) and what the writer thought acceptable ten years ago, but not now.

Computer assisted learning
Some teachers have become interested in writing material for computer assisted learning in various fields. Certain languages have been developed for this purpose by non-experts with such tasks. One language, Pilot, is available for microcomputers. These languages help with such things as test organisation and student responses. A language for CAL should have particular features but its need for structure is not less than that of a general purpose language. Tasks have to be analysed and the problem-solving skills cannot be escaped. Pilot is not a well-structured language.

Functional languages
There is another class of language which do recognise the need for structuring programs in a sensible manner but approach things differently. They rely heavily on the concept of function seen as a state rather than a dynamic process. The nature of the function also represents its use. For example in Basic one can use **LEN** (words) to get the length (number of characters) stored in something called words. One can think of this as a state; something that is. Or one can think of it as a process: something that will be computed. Functional languages like **PROLOG** or **LOGO** emphasise the state of things and their advocates argue that, in the long term, methods are more fruitful than the conventional ones.

One problem with such languages is a reliance on recursion, which occurs when a definition contains some sense, the thing being defined. A more likely immediate cause of development is that, with Comal and other structured Basics becoming widely available along with the best tested teaching for the BBC and National Extension College seem determined to sustain it, and not completely, for it does have occasional use in advanced work. The language may also see a more unified and systematic approach to the handling of data, particularly records and direct access files. Beyond that we will have to ask Stanley Kubrick.

Roy Atherton is Director of the Hampshire Computer Education Centre, Reading, and author of 'Structured Programming with COMAL' published this month by Ellis Horwood.



continued from page 32

was building up a vocabulary of spelled words.

I think she was a pioneer embarking on a new route to mastery of the alphabet radically different from the traditional modes of teaching reading. She was learning it because she could use it in a very personal way to make the computer do things for her and because at the same time she was affirming herself as a learner: a person capable of appropriating adult knowledge.

She was also affirming her membership of a social group. It was quite visible to her that the children depended on one "mother" in this learning process.

The girl who said to her teacher "I want to do that" and the first grader who said to the third grader "show me how to do that" are just two out of hundreds of documented examples of children refusing the "infantilization" inherent in most contemporary schooling. These children refused to do what children are supposed to do. Nothing enrages me more than when people criticise my criticism of school by telling me that schools are not just places to learn maths and spelling, they are places where children learn a vaguely defined thing called socialization.

I know. I think schools generally do an effective and terribly damaging job of teaching children to be infantile, dependent, intellectually dishonest, passive and disrespectful to their own developmental capacities. I think that the examples I have given of learning in a computational environment provide a glimpse of a context for learning in which socialization would be based on a potentiation of the individual, an empowering sense of one's own ability to learn anything one wants to know, conditioned by deep understanding of how these abilities are amplified by belonging to cultures and communities.

Probably, these criticisms have often been made by humanists. If they have failed to put schools right what can a "technologist" do? This takes away the cause of the problem. The anti-social nature of school undoubtedly has roots in the class structure of society and in the nature of the Freudian unconscious. As important bodies of knowledge (such as school mathematics and the written language) are not rooted in the desires and the life experience of children schools will have to teach them artificially and by force.

If the kinds of computer experience we have seen at Lamplighter and in New York penetrate into everyday life, children will learn the knowledge of these bodies of knowledge in the same natural way as they now learn the spoken language. (In its colloquial dialects). Then school, defined as a place where the three R's are imposed by force (or by the kind of subterfuge called "motivation" which is just as bad), will no longer be necessary. Society will be able to free the task of inventing environments in which children can develop as social, loving, honest human beings without distorting this goal by the crudely technical one of stuffing the multiplication tables into their heads.

Tomorrow's Paper is now working for World Centre for Computing and Higher Resources in Paris.

Microcomputers on a chain (cont.)

use of the disc's ability to store information. For these a cassette system would be adequate; again several cassette systems would be preferable to one expensive disc system.

Administrative applications need large disc files for holding school rolls, careers information, departmental syllabuses etc. Easy access to a variety of well tried software packages such as word processing and information retrieval is also required. Again, access to the software library available to CP/M users is desirable.



Control technology applications can be met in two ways. The first is to use a cheap processor with a minimum of software, or a cheap computer (such as the ZX81). The other approach is to use the normal school computer and to control the additional devices through the language BASIC or a simple cassette system would be adequate for this work.

This brief summary shows that if there is only one source of computing power, then discs would have an advantage, and this would justify the school considering a network. Where the major objective is teaching programming or using many of the current CAL packages schools would probably do better to buy as many cassette systems as possible. Their interest in networks would be to consider how their present choice of cassette based equipment might affect their options of networking in the future.

Networks consist of file servers (i.e. disc systems which store data or programs), stations at which people work, and other peripherals such as printers. Data is transferred around the network in packages with addresses. Individual servers or stations must have some means of physically identifying themselves.

Of the two networks being considered, the Acorn Econet is currently working in schools although it has Acorn Atoms and not BBC Microcomputers attached to it. Current systems use the Acorn System 4 dual single-sided single density discs at £2200. The double sided drives cost £2450 and give access to approximately 360 K bytes of data.

The operating system is disc based but is transferred into the 40K memory to free the discs for data storage. The first version of the file server program was a 5K BASIC program which was unsophisticated. Version 2 uses a 24K machine code program.

The network uses two shielded twisted-pair cables and 5-pin DIN plugs and sockets. In order to minimise errors due to line reflections the network wires should travel directly from one end of the network to the other, passing by all of the stations on the way. Some spurs are possible but there must be only one path between any two stations.

There can be up to 256 devices attached to Econet, and file servers and stations can be mixed. If a printer server also has its own disc system, output can be spooled: stored for printing.

Data is transmitted along the wire in variable size packages. A 1K program takes about one second but an 8K program takes about two. Current networks use Atoms with limited memory size and so most programs are about 8K. All stations have equal access to the network.

There is no specific direction of flow of data as the network simply ensures a path between any pair of stations. During the time that two stations are communicating the network is continuously busy and no other station can interrupt.

It is impossible for any user to issue any command which will hold the network for more than a few seconds. Access to large files is treated as a series of separate accesses as each block is transmitted.

The Atoms or BBC Microcomputers each have an Econet interface fitted (for approximately £50) which allows communication and which has links which are set to identify the

station.

On Econet One, users can look at the screen of another station or even take over another station's screen. Version 2 of the Econet operating system has software protection to prevent unauthorised access and so allows a teacher to use Econet like a language laboratory.

The second network is the Research Machines Chain. Currently working at their Oxford factory, it is due to be tried out in three locations before being generally released after the middle of this year.

The Chain is based on Zilog's Z-NET which in turn is based on the Intel/Xerox/DEC Ethernet. It uses Digital Research's CP/M as its operating system so that most current CP/M programs will be usable on the network. It also means that each of the links, either 380Z or Link 480Z will appear to the user like a CP/M machine. The network itself can have up to 16 servers and 16 stations.

Stations can have their own local discs or printer and can define up to 16 logical disc drives as local or remote to themselves. The servers will use MP/M II as the operating system to allow up to eight users access to each server.

The system transmits data serially at 100 K bytes a second in the form of packets containing up to 512 bytes of data plus a system header. When a station receives data it retransmits the package back to the sender to say that the data had been successfully received and the next package of data can then be sent.

Whenever a station wishes to send a packet of data it first waits for the cable to clear. If there is a collision, both stations back off and wait before trying again. The important advantage of the Chain over Econet is that no one person has exclusive use of the wires for long.

There are two grades of network planned. The first, currently limited to 300m of cable, uses flexible 50-ohm coaxial cable about 5 mm in diameter, with BNC connectors. A more advanced system will use a low loss cable of 1cm diameter and will allow up to 2km of cable to be used. Both systems must use a single continuous length of cable.

The system currently offered uses a 380Z with either dual floppy disc (either 5 1/4 or 8-inch) and 56K RAM. To upgrade a current 56K dual disc system to become a server will cost about £450. Because of the space needed for the operating system, this server 380Z will not be able to run programs.



The stations can be 380Zs, although the power requirements of the floppy discs mean that not all of the current extra boards will be useable when the network interface is installed. Cassette-based 380Zs machines can also be used as stations and keep all their facilities such as high resolution graphics, analogue and PAL boards.

The operating system in the station will be larger than the CP/M and so a 32K station which still has to have BASIC loaded would not be very useful. Since most users will want high resolution graphics, particularly for CAL, it seems sensible to move to the 64K 480Z with the 40/80 character board at about £900. There are plans to offer BASIC in ROM on the 480Z and this would help slightly with reducing disc access as well as making the 480Z a more attractive standalone machine.

The system offered can support up to eight stations, but I have reservations about its usefulness at present. Dual 5 1/4 inch floppy discs cannot sensibly support eight users demanding simultaneous access. The present network will be useful for those who want work will be useful for those who want and can afford, the luxury of coming to terms with networks before the majority do. The operating systems needed to support the Chain currently use up a complete single density disc drive thus leaving little room for the data of eight users.

The future of networks lies in Winchester and mini-Winchester

continued on page 42

Heinemann Computers in Education

Just published:



Five Ways Software

These resource materials for teaching and learning with the aid of microcomputers set a new standard. The first six packages, widely recognised as of outstanding quality, are for use in secondary schools. They are the first issue from the well-known Five Ways Computer Unit in Birmingham and are subsidised by the Microelectronics Education Programme (MEP). They are currently available for the Apple II and Research Machines 380Z.

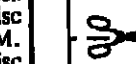
Designed by teachers, these programs and accompanying teaching notes enable those with little or no knowledge of computers to use the disks with confidence and ease.

The programs

- ★ are challenging and stimulating for pupils
- ★ are relevant to topics in public examination syllabuses
- ★ will support a variety of teaching styles
- ★ are suitable for both classroom demonstration and individual use
- ★ make imaginative use of graphics
- ★ are accompanied by teaching notes
- ★ are sophisticated yet easy to use — ideal for the naive user

Current Titles

- Climate**
14-16 years; geography
- Scales**
11 years and above; science, technology and mathematics
- Approximation, estimation, and standard form**
11 years and above; mathematics, science and technology
- Physiological Simulation**
13-15 years; biology
- Transverse waves**
14 years and above; physics and engineering
- Longitudinal waves**
14 years and above; physics and engineering
- Each disk and teaching notes** UK price £8.76 (incl. VAT) overseas price on application



Five Ways Software

Please send me a descriptive brochure and order form.

Name _____
Address _____

Heinemann Computers in Education Ltd
22 Bedford Square, London WC1B 3PH

NEW FROM WHEATON

Introduction to Computer Studies

- P. CRADDOCK AND A. HASKINS
Birmingham Educational Computing Centre
- Up-to-date information
- No previous knowledge required
- Covers CSE/O level syllabus
- Applications to everyday life
- Fully illustrated with diagrams and photographs

0 08-025002-5 flexicover £3.50

Publication: in May

Teachers: If you would like an inspection copy, please tick here ☐ write your name and school address clearly in the margin and return the complete advertisement to: the publishers: A. WHEATON & Co. Ltd., FREEPOST, EXETER EX1 1AZ (no stamp needed).

Wheaton

FIRE

THE
OF AND
LL SOE
ng,
eics.
ire plan
ation of
ation
or
SSION
for a
partment
range of
able to
and En-
g.
from the
mediately
full para-
ms and
references
155422

ONSABLE	1
DATE	1

UNTSBAYE
Kathwell,
Berhampur
STUDIES
5 17 18
19 (1800-on
a rural
area.
September
Researcher for
Technol
ment is a
with inte
courses
the lower
there are
Design at
vel. There
of A' level
to assist
ole Studies
ntage.
and AP-
m (SAS
a Headma
1554252

DGE			
DATE			

HIGH
 Dagenham,
 590 5211
 B.Sc
 soon as
 temporary
 ELECTRO-
 and of the
 525 for this
 seven form
 comprehensive
 School has

Union Club.
Scale 1 with

Allowances should be
not to the
the School.
of age, qual-
experience
addresses of
and a
reased on-
19 date 16
13586 155422

**DOUGH OF
REST
PORTUNITY.**

within easy
of London and
pine Forest.
on to salary
R SEPTEMBER
HIGH SCHOOL
que, E4 BRE.
Miss J.W.
TECHNICAL
k i required
ensive school

will give the
a teach all

ical Studies.
available.
orm and furdi-
able from abn
Read Teachd.
a stamped
18th March
135422

1. *Phragmites* (Common Reed)

NCIL
SCHOOL
Carlsle
very aided
school. 11-12
-coll-
September 1982
12 Scale 3 for
main school
forms and
from the Head
School and re-
March, 1982
198618

NCIL
DEPARTMENT
OF SCHOOL

ensive 11 -
1st September
ier by mutual
entably qual-
OF DEPT. A-
ELSA. Scale 3.
ticulars and ap-
available from
ter, Newtown
Newtown (S.S.B.
to 144) for com-
plication forms
turned by 15th
(48700) 15512

Subject:

Event:

OL
9
2
11-12
er 1982
le's for
school
us and
ng Head
and re-
n. 1982
1982

EMENT
SCHOOL
oll -
eptember
mutual

HAMPSHIRE

QUEEN MARY'S COLLEGE, BASINGSTOKE (1100 Mixed)

Three senior appointments are to be made for September 1982 in this rapidly developing comprehensive (10th form) college.

ASSISTANT PRINCIPAL

(Senior Master/Mistress post - Group XIII Deputy Head Scale) With responsibility for a range of student services.

SENIOR TUTOR

(Scale IV) One of six heads of the College's care system responsible for admissions, student welfare and careers/higher education guidance.

DIRECTOR OF MATHEMATICAL STUDIES

(Scale IV) One of six directors of study responsible for the College curriculum and its development. The Director of Mathematical Studies leads a team of 15 staff responsible for 24 courses, 80% of the students follow at least one course in the Mathematical Studies Area. Please write (s.a.e.) for full details of these posts to: The Principal, Queen Mary's College, Clidenden Road, Basingstoke, RG21 3HF.

APPOINTMENT OF HEADTEACHER

WOODLANDS ESN (M) SCHOOL, Beechdale Road, Aspley, Nottingham NG8 3EZ

Qualified Teachers are invited to apply for appointment as Headteacher of the above school. The vacancy is created by the retirement of the present Headteacher.

Number on roll: 178 Salary: Group 8 (S). Vacant: Summer term 1982. To be filled as soon as possible thereafter.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.



SOUTH GLAMORGAN COUNTY COUNCIL

HEADTEACHER GROUP 5 (S)

(PRESENT ROLL: 65)

GREENHILL SCHOOL, CARDIFF

Applications are invited from well qualified and experienced teachers for the post of Headteacher of this day special school with pupil hostel accommodation attached for those requiring this facility. The school is a mixed school for children in the age range from 6-16 years. The post falls vacant in September, 1982, on the retirement of the present Headteacher.

The post is non-residential as the residential units are directly supervised by a senior member of staff responsible to the Headteacher. Residential accommodation is on a five-day basis, the children returning home for weekends and holiday periods.

Further particulars and application forms may be obtained on receipt of a stamped addressed foolscap envelope from the undersigned, to whom completed forms should be returned within 14 days of the appearance of this advertisement.

L. J. A. Cote, Director of Education, Education Offices, Kingsway, Cardiff.

WEST GLAMORGAN County Council

PROPOSED TERTIARY COLLEGE, NEATH

Associate Vice Principal

The County's first tertiary college, to be formed by merging the existing adult form and further education provision in the Neath area, will open in September, 1982.

The above post, the second of two vice principalships, will have a particular responsibility for resources, including teaching staff, budgetary and accommodation matters. The appointment will date from September, 1982, or earlier if possible, and salary will be on the minimum of Grade 5 vice principal scale, viz. £14,874 p.a.

Application forms and further particulars are available on receipt of a stamped addressed envelope from the Director of Education: Personnel Section, Princess House, Princess Way, Swansea. The closing date for receipt of completed application forms is Monday, 22nd March, 1982.

SECONDARY OTHER THAN BY SUBJECT continued

Scale 1 Posts

BARKING AND DAGENHAM

LONDON BOROUGH OF BARKING AND DAGENHAM
School Road, Dagenham, Essex
Scale 1 (100)
Required for September 1982. A teacher of general subjects is required to teach in the school. Ability to offer some craft or advantage but not essential. Middle school teachers would be considered. Scale 1. Temporary one-term appointment.

Apply immediately by letter to the Headteacher, giving curriculum vitae and names and addresses of two referees. The successful candidate will be interviewed by the Headteacher. (49677) 135538

SENIOR TUTOR

(Scale IV)

One of six heads of the College's care system responsible for admissions, student welfare and careers/higher education guidance.

DIRECTOR OF MATHEMATICAL STUDIES

(Scale IV) One of six directors of study responsible for the College curriculum and its development. The Director of Mathematical Studies leads a team of 15 staff responsible for 24 courses, 80% of the students follow at least one course in the Mathematical Studies Area. Please write (s.a.e.) for full details of these posts to: The Principal, Queen Mary's College, Clidenden Road, Basingstoke, RG21 3HF.

BEXLEY

LONDON BOROUGH OF BEXLEY
View School, Bexley, Kent
Scale 1 (100)
Required for September 1982. A teacher of general subjects is required to teach in the school. Ability to offer some craft or advantage but not essential. Middle school teachers would be considered. Scale 1. Temporary one-term appointment.

Apply immediately by letter to the Headteacher, giving curriculum vitae and names and addresses of two referees. The successful candidate will be interviewed by the Headteacher. (49677) 135538

DEBBYSHIRE

MATLOCK HIGHFIELD SCHOOL (GROUP 5)
Scale 1 (100)
Required for September 1982. A teacher of general subjects is required to teach in the school. Ability to offer some craft or advantage but not essential. Middle school teachers would be considered. Scale 1. Temporary one-term appointment.

Apply immediately by letter to the Headteacher, giving curriculum vitae and names and addresses of two referees. The successful candidate will be interviewed by the Headteacher. (49677) 135538

REDBRIDGE

LONDON BOROUGH OF REDBRIDGE
Chesham Road, Redbridge, Essex
Scale 1 (100)
Required for September 1982. A teacher of general subjects is required to teach in the school. Ability to offer some craft or advantage but not essential. Middle school teachers would be considered. Scale 1. Temporary one-term appointment.

Apply immediately by letter to the Headteacher, giving curriculum vitae and names and addresses of two referees. The successful candidate will be interviewed by the Headteacher. (49677) 135538

HUMBERSIDE

COUNTY COUNCIL EDUCATION DEPARTMENT
Scale 1 (100)
Required for September 1982. A teacher of general subjects is required to teach in the school. Ability to offer some craft or advantage but not essential. Middle school teachers would be considered. Scale 1. Temporary one-term appointment.

Apply immediately by letter to the Headteacher, giving curriculum vitae and names and addresses of two referees. The successful candidate will be interviewed by the Headteacher. (49677) 135538

METROPOLITAN BOROUGH OF SANDWELL

DARTMOUTH HIGH SCHOOL
Scale 1 (100)
Required for September 1982. A teacher of general subjects is required to teach in the school. Ability to offer some craft or advantage but not essential. Middle school teachers would be considered. Scale 1. Temporary one-term appointment.

Apply immediately by letter to the Headteacher, giving curriculum vitae and names and addresses of two referees. The successful candidate will be interviewed by the Headteacher. (49677) 135538

UNITED WORLD COLLEGE OF THE ATLANTIC

Atlantic College, first of the United World Colleges, has 350 sixth form students on scholarship from some 80 countries. The College prepares all students for the International Baccalaureate and has an extensive programme of co-educational and community service. Applications are invited for the following vacancies:

HISTORY

Teacher of A-level and Twentieth Century World History, also to act as Director of College China Japan Resource Centre.

MATHEMATICS

Two appointments. Teaching will be at both Higher and Subsidiary Levels of the International Baccalaureate. A strong school commitment is expected towards the International and community service aims of the College. Salaries are above Burmah Scale.

Applications (full c.v., no forms, with names of three referees) should be sent to the Headmaster, United World College of the Atlantic, St. Donata's, Gales, Llantwit Major, Glamorgan CF8 9WR, from whom further details are available on receipt of s.a.e. 9 x 6".

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Application forms and further details may be obtained by forwarding a stamped, addressed, foolscap envelope to the Director of Education at County Hall.

Closing date: 19 March 1982.

Previous applications will be brought forward.

Education Department Assistant County Education Officer (Administration)

£12,408-£13,593

This challenging senior third tier post calls for an energetic person, preferably with an administrative qualification at Degree level. Substantial administrative experience at a responsible level with a local education authority is essential.

The postholder will be responsible for the efficient administration of the wide range of Education Department functions.

Removal expenses to a maximum of £300 are payable in appropriate cases.

Application form, further information and Job Description from the County Personnel Officer, County Hall, Newport.

(Telephone Newport 524031, extension 127)

Closing date: 18 March



HARROGATE BOROUGH COUNCIL NIDDERDALE RECREATION CENTRE Assistant Manager (Post No. T229)

£5,652-£6,333 p.a.

Applications are invited from men and women for the above post, which may be suitable for newly qualified University or College of Education Graduates looking for first appointments. This post would provide excellent opportunities for well qualified persons to obtain practical experience in all aspects of managing a joint use recreation centre which is situated at Pateley Bridge, a small country town with a population of approximately 2,000 and an estimated catchment area of about 8,000.

The facilities include a main hall 33m x 22m, two squash courts, a hard porous area, three tennis courts and social areas for which it is hoped a full justices licence may soon be obtained.

It is important that the person appointed becomes involved with local community organisations and lives in the immediate catchment area. Assistance with resettlement expenses in approved cases and temporary housing accommodation may be available.

Application form and job description may be obtained from the Personnel Officer, Council Offices, Crescent Gardens, Harrogate HG1 2SG. (Telephone Harrogate (0423) 68854, Ext. 253.) Closing date: 24th March, 1982.

TAMESIDE METROPOLITAN BOROUGH

EDUCATION DEPARTMENT SENIOR ADVISER - PRIMARY EDUCATION SOULBURY HEAD TEACHER GROUP 10

£14,385-£15,613 p.a.

Applications are invited for the above post which has become vacant as a result of retirement. The person appointed will work under the direction of the Chief Adviser and will have responsibility for a team of general advisers in relation to their work in Primary Education.

Applicants should be well qualified in their field and have successful teaching and advisory experience.

Generous assistance with relocation expenses in appropriate cases.

Application forms and further details from Chief Personnel Officer, Council Offices, Wellington Road, Ashton-under-Lyne, Greater Manchester, OL6 8DL to be returned by 19th March, 1982.

Sheffield Education Department ASSISTANT SCHOOLS OFFICER (STAFFING AND OPERATIONAL)

£12,991-£29,993

An appointment may be made above the minimum of the post. The successful candidate is likely to be an honours graduate with good teaching experience.

This is an important position carrying considerable responsibility as a member of a team responsible for the administration of the staffing policies of this Authority for primary, secondary and special schools.

There will be an opportunity to contribute to a variety of policy matters and to obtain a wide experience in the administrative function of this Department.

The post offers opportunities to gain administrative experience in a vigorous department and the successful candidate is expected to seek promotion to a senior post in this or another Authority within about three years.

It is the policy of the Sheffield City Council to provide equal employment opportunities and consideration will be given to all suitably experienced and qualified applicants regardless of handicap, sex or race.

Further particulars and application forms may be obtained from the Chief Education Officer (Ref. 46709), Education Department, 15, Gold Street, Sheffield S1 1RA, to whom completed applications should be returned within fourteen days of the appearance of this advertisement.

Senior Administrative Officer

£6,501-£7,137 p.a.

The person appointed to this post at Cornwall Technical College will be the deputy to the College Chief Administrative Officer and will take charge of a very busy College General Office. This post, therefore, requires an energetic person, with supervisory experience in a College, Local Government or Industry, with a sound knowledge of administrative, financial and clerical procedures. To commence duties as soon as possible.

Application forms and further details may be obtained on receipt of a stamped addressed envelope from the Chief Administrative Officer, Cornwall Technical College, Redruth, Cornwall TR16 3RD, to whom completed forms should be returned by the 19th March, 1982.



WOLVERHAMPTON BOROUGH COUNCIL Education Department

PROFESSIONAL ASSISTANT

Salary Grade PO(a) (£8991-£9993)

Applications are invited for this recently established post dealing with the Education Act 1981 and assisting in the implementation of the re-organisation of Special Schools and Services in the next few years. The successful applicant will have experience in some aspects of Special Education, preferably at a responsible level in a variety of establishments and will be required to make an energetic contribution at a professional level to new and demanding developments.

Application form and further particulars obtainable from the Director of Education, Civic Centre, St Peter's Square, Wolverhampton, WV1 1RR. Closing date: 19 March, 1982.

THE CAREERS SERVICE IN HAMPSHIRE IS GROWING!

Applications are invited for the following posts, many of which are newly created following a decision to expand the Careers Service in Hampshire.

We are looking for qualified careers advisers. However we will consider students completing Careers Service training courses in July for the three Careers Adviser vacancies.

In appropriate cases newly appointed staff will be entitled to claim relocation allowances.

Divisional Careers Adviser South East Hampshire

Ref. 4607A PO2 (2-6) £11,517-£12,690

The Divisional Officer is currently responsible for a team of 50 staff (to be increased shortly) operating from six full-time offices serving 519,000 people living in the Portsmouth 'travel to work' area and as a member of the management team assists in the formulation of the policy of the Service. This is a demanding post requiring a person with varied Careers Service experience and proven organisational and leadership skills. This post will become vacant on the imminent retirement of the present holder.

Senior Careers Adviser Rheindahlen

Ref. 4607B SO1 £8,190-£8,733

Specialist Careers Adviser Minden

Ref. 4607C AP5 £7,371-£7,875

The Careers Service in Hampshire provides vocational guidance facilities for pupils attending Service Children's Schools in Germany. These posts are available from 1st August, 1982, when the present postholders complete their overseas contracts.

The posts are permanent but in each case an undertaking to serve abroad for a minimum of two years/maximum of three, will be a condition of employment.

Both posts attract Inner London Allowance, Foreign Service Allowance, travel allowance and other accommodation or rental allowance. A current driving licence is essential.

These posts are suitable for resourceful and experienced Careers Advisers. Applicants for the post of Senior Careers Adviser who is responsible for the post of Specialist Careers Advisers based at Minden and Gutersloh should, in addition, be able to demonstrate staff supervision and management skills.

Application forms and further details from Chief Personnel Officer, Council Offices, Wellington Road, Ashton-under-Lyne, Greater Manchester, OL6 8DL to be returned by 19th March, 1982.

Two Careers Advisers Northern Division

Ref. 4607I AP3/4 £5,652-£7,137

Careers Adviser South West Division

Ref. 4607J AP3/4 £5,652-£7,137

These three new posts are available with effect from 1st July, 1982.

(Minimum starting salary for newly qualified officers is £5,652 with accelerated progression to £9,601 after one year.)

Specialist Careers Adviser (Industrial and Educational Liaison)

Ref. 4607D AP4/5 £6,501-£7,875

Specialist Careers Adviser (Industrial and Educational Liaison)

Ref. 4607E AP4/5 £6,501-£7,875

Specialist Careers Adviser (Industrial and Educational Liaison)

Ref. 4607F AP4/5 £6,501-£7,875

Specialist Careers Adviser (Able Pupils)

Ref. 4607G AP4/5 £6,501-£7,875

Specialist Careers Adviser (Able Pupils)

Ref. 4607H AP4/5 £6,501-£7,875

Two Careers Advisers Northern Division

Ref. 4607I AP3/4 £5,652-£7,137

Careers Adviser South West Division

Ref. 4607J AP3/4 £5,652-£7,137

Specialist Careers Adviser (Industrial and Educational Liaison)

Ref. 4607K AP4/5 £6,501-£7,875

Specialist Careers Adviser (Industrial and Educational Liaison)

Ref. 4607L AP4/5 £6,501-£7,875

Department of Education and Science HM Inspectors of Schools

Education of Children in Care

Applications are invited from men and women (preferably aged between 35-45) for appointment as HM Inspectors to take a particular interest in the education of children in social service institutions.

The range of responsibilities includes inspecting and advising schools and colleges, consulting with local education authorities, contributing to in-service training and working closely with the Social Work Service of the Department of Health and Social Services. The major purpose of these and other activities is to provide professional advice to the Department of Education and Social Services in respect of the education provided in social service institutions also have general duties in primary and secondary schools.

Applications are invited particularly from candidates with recent and substantial experience of teaching in Community Homes and Education (CHCs) or in Observation and Assessment Centres (O and As). Experience of teaching in ordinary primary or secondary schools as a class teacher or subject specialist, or of working with children with learning difficulties would be an advantage.

Starting salary, within the range of £13,218-£18,761 (higher in London). Higher posts are filled by promotion.

Application forms (to be returned by 2 April, 1982) and further information may be obtained from Miss J. D. Church, Department of Education and Science, Room 16/17, Elizabeth House, 39, York Road, London SE1 7PH, telephone 01-928 9222, extensions 2237 or 2788. Please quote 1/82.

Administration General

AVON

Applications are invited for the post of Bath YMCA General Secretary vacancy; position of business manager; house manager; and a Youth Centre General Secretary. YMCAs, 200000

DEVON

Advisers

Salary £13,506-£14,631

Two posts are now vacant as a result of a restructuring of the Advisory Service:

(i) Adviser for Computers in Education (based in South Devon).

You will play a leading role in the further development of computers in education in primary and secondary schools throughout the County including computer assisted learning, computer appreciation and computer studies. A major contribution will also be expected in the field of information technology.

(ii) Adviser for Primary Education (Early Years) (based in North Devon).

You will join a team of primary advisers. Together with responsibility for all primary schools in one Area of the County you will go a share, with the Senior Adviser for Early Years, in the support of early years education in infant, first and primary schools in the county as a whole. You will be expected to indicate your particular curriculum subject interest.

Application form and further details (s.a.s. required) from the Chief Education Officer, County Council, Topham Road, Exeter EX2 4QG returnable by 19th March, 1982.

DEVON

Directorate of Education and Recreation Careers Service

Careers Officer (Further Education)

Salary - AP 3/4/5 (£8,135-£8,388 p.a. inc.)

This officer will be working under the direction of the Senior Careers Officer (Higher and Further Education) mainly with careers following a wide range of vocational and academic courses at a large college of further education but will also be expected to contribute to the work of the Schools team.

Careers Officer (to work with the Young Unemployed)

Salary AP 3/4/5 (£8,135-£8,388 p.a. inc.)

This is a newly created post, under the Government's Strengthening Scheme, which has been set up to deal with the problems of unemployment amongst young people in the Borough.

Kingston upon Thames is an area which has only recently felt the growth of unemployment and there should therefore be scope for development work within the Youth Opportunities Programme and the new Youth Training Scheme.

Duties will include marketing work with employers, counselling and placing work with the young unemployed and liaison with other agencies concerned.

Applicants for both posts should be fully qualified Careers Officers, starting salaries will be determined according to qualifications and experience. Casual User Car Allowances for both posts.

Application forms and further details from the Administration Manager (DER), Guildhall 2, Kingston upon Thames, Surrey, Tel: 01-848 2121, Ext. 2316. Closing date: 19th March, 1982.

ROYAL BOROUGH OF KINGSTON UPON THAMES

ADMINISTRATION LEA

NORTHUMBERLAND

Psychological Services

Psychologist (Grade B)

£14,488 plus £1,104 London

A vacancy exists for an experienced psychologist to work in the Psychological Services Division of the Inner London Education Authority.

Applicants should normally have an honours degree in psychology, teaching experience and postgraduate training in educational psychology or equivalent. A minimum of three years experience as an educational psychologist is required.

Application forms and further details are available from the Education Officer, Psychological Services, County Hall London SE1 7PS. Please enclose a stamped addressed envelope.

Closing date for the receipt of completed applications is 19th March 1982. (2347 380000)

NORFOLK

AREA EDUCATION

Psychologist

£15,240 - £15,600 p.a.

This is a senior post for a fully qualified and experienced Educational Psychologist.

Responsible for full range of psychological work in the area of the Western Education Area with particular reference to multi-disciplinary assessment teams (3).

Essential car user allowance. Relocation expenses paid where appropriate.

For application forms and further details, please contact the Area Education Officer, County Hall, Norwich, NR1 3DG. Tel: 01603 600000.

THE ASSOCIATED EXAMINING BOARD

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

THE ASSOCIATED EXAMINING BOARD

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS

EXAMINERS
